SOVIET LIFE

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NEW LAW ON MARRIAGE AND FAMILY

ROOSEVELT-LITVINOV: MAN TO MAN TALK



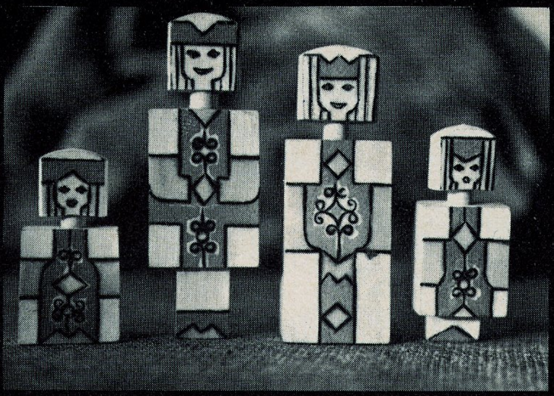
LAZY
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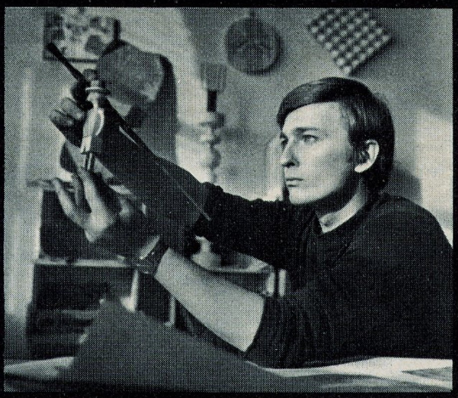
HOBBY? NO, SECOND PROFESSION

BY MYUDA DEREVYANKINA
PHOTOGRAPHS BY SEMYON MAISTERMANN, TASS

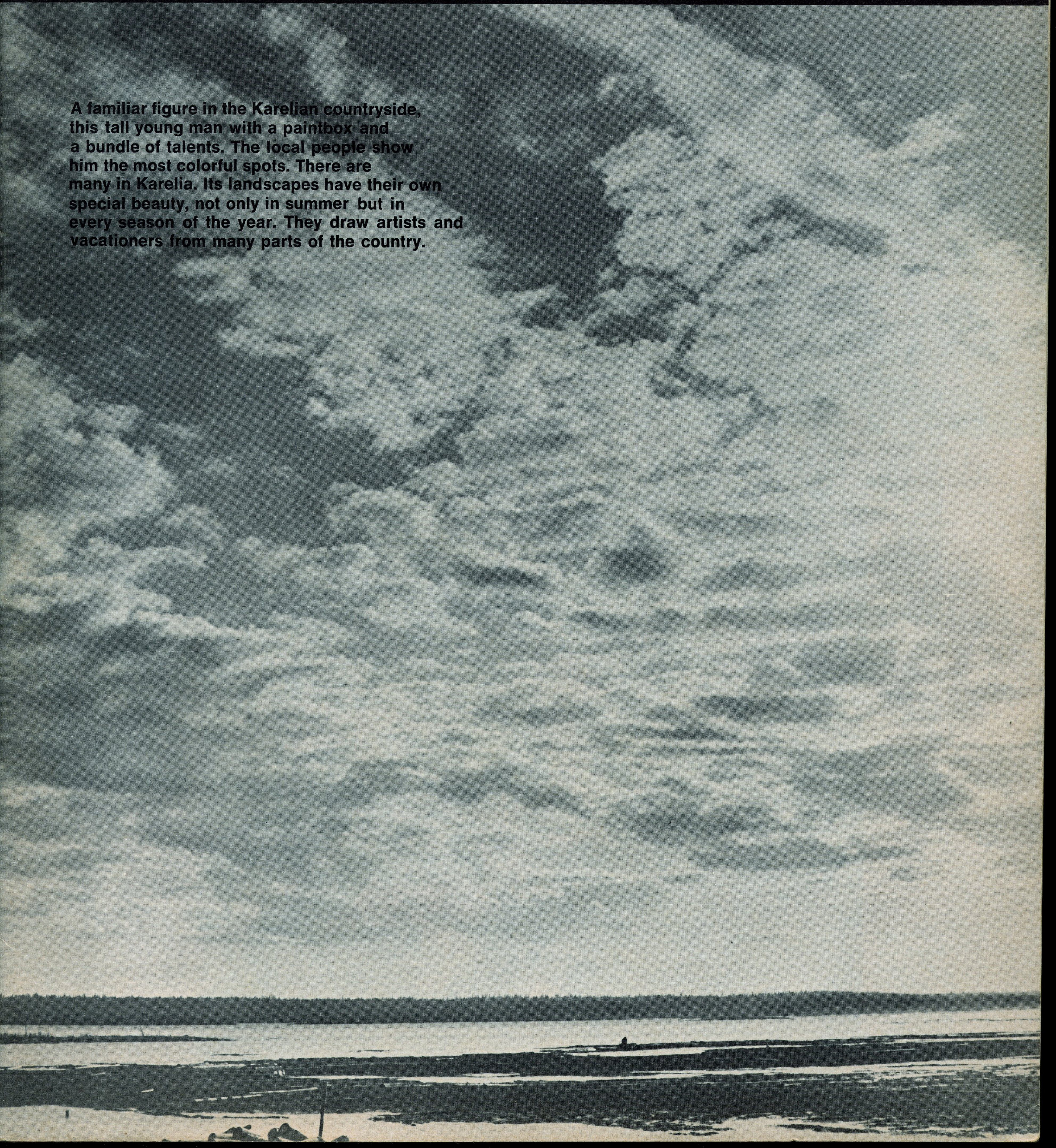








Yuri Nivin has all the makings of a fine surgeon, his professors say. He is also a gifted sculptor and a promising musician.



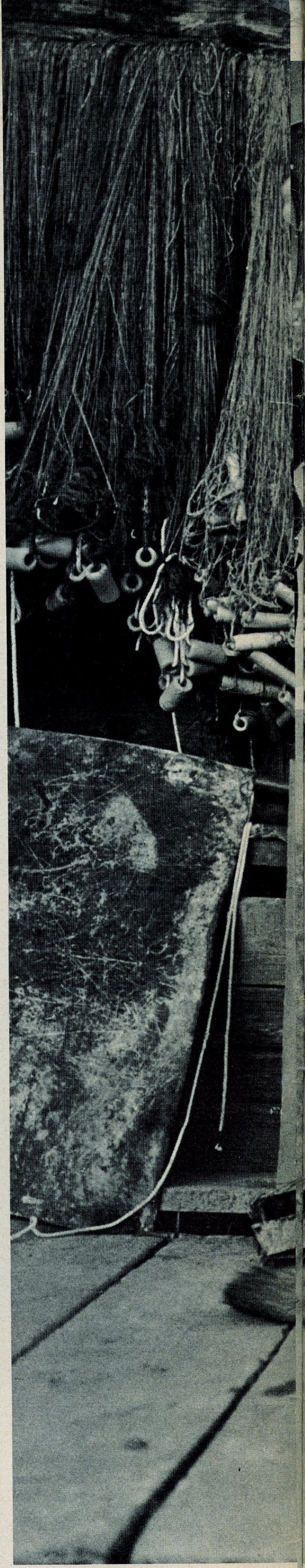
A familiar figure in the Karelian countryside, this tall young man with a paintbox and a bundle of talents. The local people show him the most colorful spots. There are many in Karelia. Its landscapes have their own special beauty, not only in summer but in every season of the year. They draw artists and vacationers from many parts of the country.

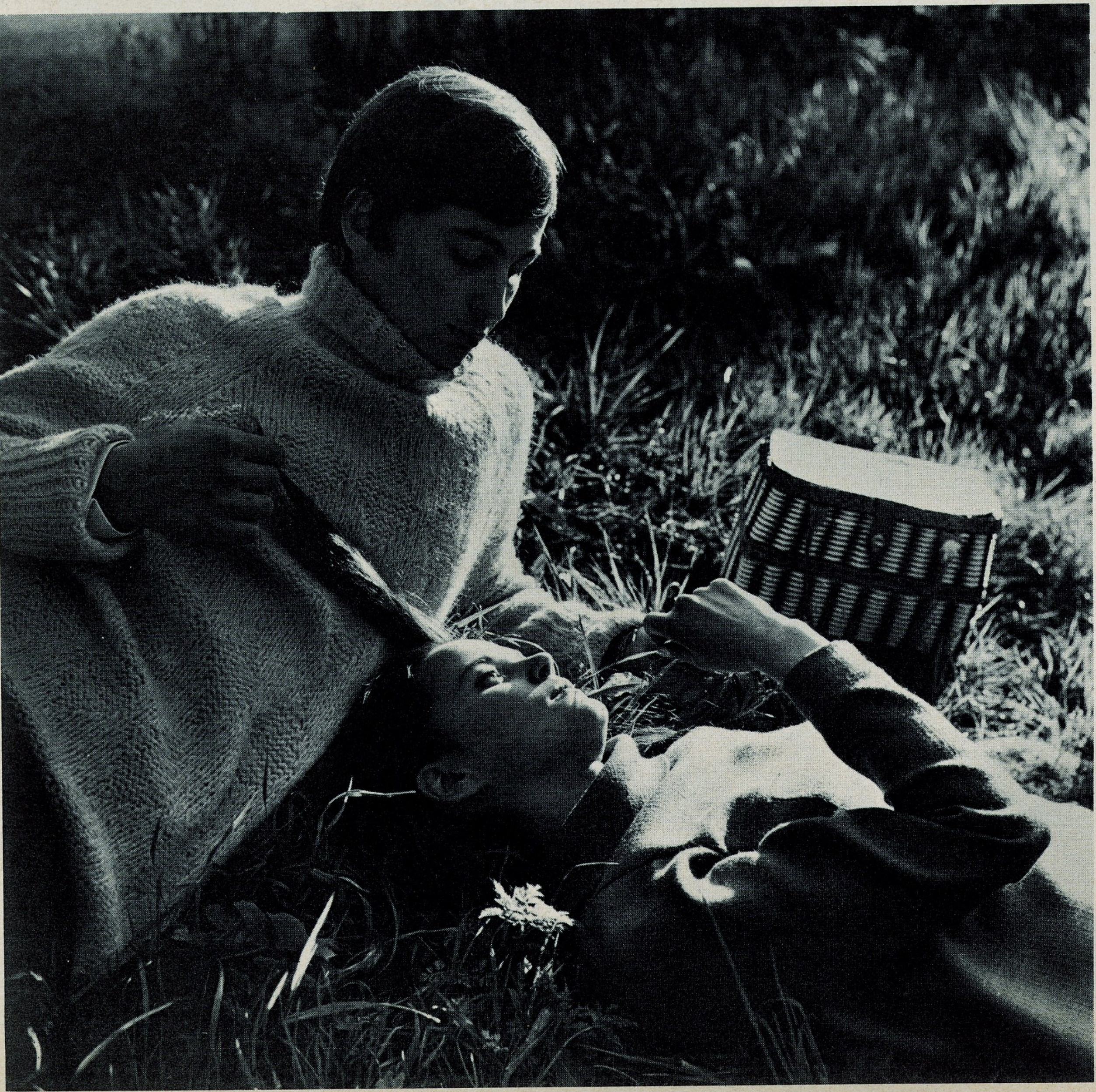
The University of Petrozavodsk Quintet is the city's top amateur ensemble. Yuri plays the bull fiddle, but he can double on the trumpet.



In spring there is a very special quiet in the Karelian fishing country, says Yuri. He called his water color of a scene like this one *Silence*







His girl friend does not mind Yuri's long and meditative silences. She calls them communicative silences.



Karelian fishermen are excellent story tellers. They can show you where the epic hero Kalevala battled the giant. "Right there in these woods."

AMONG KARELIA'S MANY FOLK TALES is one about a greedy giant who found a cache of precious stones and tried to pick them up all at once. But as he picked up another two he dropped three. Too greedy for any sensible measure, he persisted until he died of hunger.

There is a small wooden figure of this greedy giant on the desk of Yuri Nivin, who is medical student, painter, sculptor and musician all rolled up in one.

"I carved it for myself," Yuri says, "as an ever-present reminder. I know that I tend to grab everything at once, and I don't want to come to the same sad end! It reminds me to do the reverse—to operate on the principle that the more you give, the richer you get."

Nature has endowed this 23-year-old student with many talents. He has the makings of a fine surgeon, say his professors; he is a gifted artist, his membership in the USSR Union of Artists certifies to that; and as though these were not enough, he is also a talented musician and a journalist and poet.

"You were born under a lucky star!" Yuri's friends tell him. They may be right, but Yuri himself believes that everybody gets a bouquet of talents from birth.

"Just look at kids. They are all talented. All you need to do is develop them. Even the Bible admonishes us not to hide our talents under a bushel."

That's something Yuri has never done, he'll tell you.

"Ever since I was so high, I was one big question mark, like most kids," Yuri says. "And I also had a passion for beautiful things. My curiosity was satisfied to some degree by the many groups at school and our Young Pioneers palace. First I joined a dance group, then the orchestra, and after that the art studio. In between I worked with a radio electronics group and invented an automatic candy vendor. Semiautomatic really. I did have to put the candy in by hand. Then I had some very good teachers. Though they scolded me for being scatterbrained, they never refused to answer my endless questions. They taught me to draw, play the trumpet and bass fiddle, carve, dance and make things. Mother was a domestic science teacher. I had no father, and her pay was certainly not enough to hire private teachers and instructors for all that I learned. To this day I feel eternally grateful to the instructors at the Young Pioneers palace and am only too happy to pay them back in a small way by supervising an art group. The kids in my group decorated the walls. But aside from that I like going there. As for my feeling about things beautiful, I was simply lucky to be born in Karelia."

Karelia, one of the loveliest parts of the Soviet Union, has become a tourist mecca. It has inspired many very popular songs. One says: "For a long time I'll be seeing Karelia in my dreams, its blue lakes amidst the thick forests like blue eyes amidst pine eyelashes, its cliffs now pink in the sunset, now blue in the moonlight."

"Our cliffs and rocks do range the whole color spectrum," Yuri said. "It's only at first that they seem gray. After a longer look you see them turn blue, red and gold. I have traveled by car and foot throughout Karelia, and I believe that it really is the original home of beauty. Perhaps that is why we have so many talented artists among our farmers and why Kizhi, that gem of Russian wooden architecture, is in Karelia. I have gone to the villages to sketch the old embroideries, the carved tracery of the windows and roofs, and the ornamentation on the homespun blouses and table runners. I begged the old ladies to show me their embroidered and lace-trimmed wedding sarafans. I have spent hours admiring their fanciful patterns. For me this was discovering beauty. Later I gave them a second life, I hope, in my own drawings and wood carvings. Don't think I just copy. I try to blend the ancient and the modern—after all I am today's product. I think that my best work is bound up in one way or another with the traditional crafts, the stories about the Karelian village and the Karelian sagas and fairy tales."

In the studio he was given recently by the Petrozavodsk City Soviet Yuri shows, facing forward, his carved miniatures *Shrewd Peasants, Suitors, Newlyweds,* a couple in national costume and *Karelian Family*. Those he doesn't like at their present stage he turns facing the wall. He will go back to them eventually. He has remade and altered any number of these whimsical figures that catch the Karelian spirit so faithfully.

"Each figure has its own biography, some of them more authentic than my own," he says with a grin.

Yuri's own biography can be compressed into half a page. He was born in 1945, the year the Allied Nations defeated nazi Germany. His father was killed that same year. He left school after the eighth grade so he could help out his mother and sister.

"Mother objected, she wanted me to stay in school. But I was pigheaded. I wasn't satisfied with that cocoon stage of schoolboy. I wanted to have a taste of real life. I started out as a hospital orderly and later worked on an ambulance team. Hobnobbing with the pains of others cures you of egoism and narcissistic admiration of your own talents. I made up my mind to become a doctor and, after finishing night school, was admitted to the university. I will soon graduate. I would like to do beauty surgery, by which I mean not only getting sick people back on their feet again but making them as beautiful and handsome as they were before.

"Painting is not a hobby with me; it's my second profession. I think a person can have two professions. They enrich one another. I get the same pleasure seeing the joy on the face of a sick man who has recovered and watching the faces of people who look at my work. Music is sheer recreation. Why? It doesn't torture me, which is more than I can say about medicine or painting."



Yuri Nivin's *Letka-enka* was on display at the Soviet Pavilion in Montreal, at EXPO-67. It was also shown in Moscow at the Exhibition of the Art of the Northern Peoples. Yuri received a great many letters from viewers. This one came from Nina Velikanova, a student at the Sverdlovsk Polytechnic Institute, in the Urals. "You are like the kind Father Karlo of the popular fairy tale. Only you have made not one funny puppet, Buratino, but six charming, amazingly merry, never sad wooden little men. Looking at them, one feels a dancing itch in one's toes. 'One, two, put on your shoe.' We are dancing the *letka* with them. You are a fortunate man; you are very rich: look how many gifts you have. Couldn't you give me just one?"



Yuri looking over a work in progress at the studio of sculptor-friend Edward Akulov.

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Front Cover: Exams are over, and there are two whole weeks of fun ahead.

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NEW LAW ON MARRIAGE AND THE FAMILY

The new law on marriage and the family adopted by the USSR Supreme Soviet went into effect on October 1, 1968.

Soviet citizens awaited its passage with great interest. Understandably, for no other sphere of legislation so closely concerns each individual; no other law touches the most intimate human relations or affects social morality so deeply.

The first legislation on marriage and the family in the new Soviet society was adopted immediately after the Revolution, in December 1917. These decrees, and the codes later adopted by the union republics, were designed to protect women and children and to establish the complete equality of men and women, regardless of religion, race or nationality. Monogamy, voluntary marriage and the right to divorce were confirmed by law.

As our society developed, however, and economic and social conditions changed, marriage and family relations, while improving, began to raise problems that needed legal solutions. From time to time the government introduced changes in the existing law. In recent years it became obvious that a new law was required.

Several years were spent drafting the new Fundamental Law, and wide sections of the population were involved. Its provisions were discussed in the press, at factories, offices, collective and state farms, colleges and scientific institutions. The permanent commissions of the USSR Supreme Soviet working on the projected law received more than 7,000 suggestions and criticisms in the two and a half months after the draft was published. More than 8,000 letters about the bill were written to the newspaper *Izvestia*. Other newspapers and magazines received a large number of letters with recommendations and suggestions. The press regularly published articles on the bill, readers' letters, and surveys of the proposals and criticisms. Debates were held on the subject at hundreds of factories and collective farms. Ministries and government departments expressed their opinions. The scientific community, people in literature and the arts, teachers, doctors, members of the Communist Party, trade union and Young Communist League organizations and workers in the judiciary took an active part in the discussion. Many proposals were offered by the deputies when the bill was discussed by the USSR Supreme Soviet.

The projected law as a whole was generally approved. It was adopted by the Supreme Soviet after the many proposals and criticisms had been taken into account.

THE NEW LAW includes provisions from the previous law and the codes of the individual republics, which have been tested by years of practice. It also has a great many new provisions.

As previously, the new Fundamental Law says that only a marriage which has been officially registered has legal force. This definition is vital to the central goal of Soviet family legislation, that is, to strengthen the family unit.

We have long been concerned with stabilizing marriage and the family, preventing hasty and thoughtless marriage and divorce, and increasing the area of parent responsibility for the support and education of their children.

When the Soviet state was founded, it was unable to end the wife's economic dependence on the husband immediately, but it did remove the legislative obstacles to their equality. Marriage and divorce were made completely free and voluntary.

In the early Soviet period women had not yet acquired full economic equality with men, nor was the state able to give material assistance to women who were not married to the fathers of their children. Our laws, therefore, gave a woman the unrestricted right to bring to court the man she considered the father of her child, have the child's paternity established by court ruling, and be awarded alimony for the support of the child.

These measures helped solve the main problem of giving women freedom and equality with men in marriage and family relations. But now another problem arose—the stability of marriage and the family.

The ease with which one could get married and divorced, the possibility of obtaining alimony for the support of a child born out of wedlock, even as a result of a casual relationship, gave some young people a thoughtless, irresponsible attitude toward marriage. The number of short-lived marriages increased, as did the number of divorces.

Weakness in the law giving women the right to sue in court to have a child's paternity established and to obtain alimony for the support of children born out of wedlock began to become obvious. A law intended to protect the interests of the mother was not infrequently used by an unscrupulous woman, who would sue a man who was not the father of her child. Directed against irresponsible fathers, it sometimes hurt honest people. The unlimited right to sue for alimony enabled a light-minded woman to give little thought to the fate of a child born out of wedlock. The impossibility of reliably establishing paternity gave rise to many legal errors.

The war aggravated the problem. Like all wars, it weakened family ties. Men were cut off from their families for long periods. Millions of them were killed. A disproportion arose between the number of men and women of marriageable age. And this led to a sharp drop in the birth rate. Steps had to be taken, including legal steps, to strengthen the family and raise the birth rate. A decree of the Presidium of the USSR Supreme Soviet adopted on July 8, 1944, made serious changes in the law on the family.

The decree established that a marriage was legal only if it was officially registered. It introduced a complex divorce procedure. It repealed the right of an unmarried mother to sue in court to have her child's paternity established or to obtain alimony.

The decree was intended to strengthen the family by prodding women to marry before they had children, a formality which is in the interest of society, the woman and her children.

At the same time, in order to protect children, the law provided that a state allowance be paid to unmarried mothers. It gave them the right to place their children in an institution where they would be completely maintained by the state, and priority for day nursery or kindergarten accommodations.

The law was based on a good idea, but the juridical form in which it was embodied led to abuses.

Previously, the law gave an unmarried mother the unlimited right to sue the father of her child for alimony. The Decree of July 8, 1944, narrowed this right down so much that in some cases its effect was contrary to that intended.

The earlier principle was that children of unmarried parents and children born in wedlock had equal rights without exception. Hence the right to paternity was enjoyed by children born of casual relationships even when it was virtually impossible to establish paternity. Now the situation was reversed. Even the paternity of children born of parents who had lived to-



gether for a long time could not be legalized although the reason the marriage could not be officially registered was often beyond the couple's control. A decree aimed against the light-mindedness of a few thoughtless or dissolute women penalized all unmarried mothers, while the father of children born out of wedlock remained completely free of obligations.

The decree actually encouraged men to take advantage of trusting women. The previous law had sometimes encouraged thoughtless women; the new one protected dissolute, irresponsible men.

While the Decree of July 8, 1944, saw to it that the material interests of children born out of wedlock were taken care of by their mothers and the state, it neglected the psychological and emotional effects completely. Children born out of wedlock were not only deprived of all rights as regards their fathers; they did not even have the legal right to claim fathers.

As a result of the involved divorce procedure many registered marriages existed only on paper. Even when the couple were living apart and had actually acquired other marriage partners, the complexity of the marriage and divorce procedures prevented them from making their new marriages legal. Under such conditions, the requirement that marriages be registered officially was meaningless. Unregistered marriages are one of the main sources of "illegitimate" children.

Essentially this was the problem Soviet legislators had to grapple with. It is more than a legal problem, of course. It has all sorts of ramifications —educational, economic, psychological, medical—and affects almost every aspect of everyday life. But legal standards will obviously play a decisive role in marriage and family relations for a long time to come, particularly since the legal aspects are part of a larger system of measures we are taking to strengthen marriage and the family.

Discussion of the draft law centered on three problems:

1. conditions for contracting a marriage
2. divorce procedure
3. conditions for establishing paternity

Hasty marriages are not the most stable foundation for a healthy family. In an article in *Izvestia* (No. 142, 1968), Anatoli Kharchev, Doctor of Philosophy and well-known Soviet sociologist, cites a study involving different groups of young people which shows that most couples who marry shortly after they meet do not stay married long. Even during the period between applying to register a marriage and the actual registration, quite a number of young people change their minds.

When the projected law was being discussed, there were a variety of suggestions for making the marriage procedure more complicated. Proposals ranged from raising the age of consent to 21 to introducing an engagement period with notice of intent to marry published in the press, making mandatory a six-month waiting period between the application to register a marriage and the actual registration, and adopting the custom of having a formal ceremony accompany the registration.

Such measures might do some good. But the old saw that love cannot be legislated had to be kept in mind. Obstacles to marriage could force young people into unions that would result in children born out of wedlock. Which is preferable: a hasty marriage or unmarried parents? This was

the subject of a great deal of heated debate.

The new law sets the marriage age as 18 but gives the union republics the right to lower it, although not by more than two years. Marriages are to be registered one month after the application is made. Union republics may reduce or increase this period. Registration offices will provide facilities for wedding ceremonies, but couples may choose to do nothing more than register. The law also provides that the two partners are obliged to inform each other of their state of health and marital status.

The other side of the problem is the procedure to annul a marriage. "Freedom of divorce," Lenin said, "does not mean 'the disintegration' of family relations but, on the contrary, a strengthening of these relations on the only possible and stable democratic foundations in a civilized society."

Divorce procedure should be based on an understanding of what freedom of divorce means. Complicated, expensive proceedings limit the freedom to annul a marriage. And conversely, the simpler the procedure, the easier it is to get a divorce.

Until 1936 the procedure was too simple. It was enough for one of the partners to apply for a divorce and pay a small fee, and the divorce was immediately registered without even calling the other party in. What that led to we all know. If it was so easy to get a divorce, why waste time thinking about whether or not to get married? In 1936 the divorce procedure was made somewhat more difficult, but it did not improve things appreciably.

The Decree of July 8, 1944, was a basic change. It declared that a divorce could be obtained only through the courts. The courts were given the right to check and weigh the grounds and to refuse a divorce (although both partners might request it) if the reasons were not sufficient. Divorce in two stages (in the People's Court and the Regional Court) with publication of a notice in a newspaper and the high legal costs involved led to another extreme. In some cases divorce was beyond the means of couples whose marriage had broken up long ago, and that, in turn, as has already been said, made it impossible to legalize a new union.

This did not help to strengthen the family and aroused justified protest. On December 10, 1965, therefore, the divorce procedures were simplified. A case had to be brought only to the People's Court, and the provision requiring the publication of a notice in the newspapers was dropped.

When the draft law was being discussed, however, there were many arguments for and against new divorce procedures. Some people defended the existing law, arguing that only the courts could prevent groundless divorce and protect the interests of both the children and the partners themselves. Others claimed that divorce proceedings were unnecessary since no one can force people to live together if they are incompatible and have decided to separate. Court suits only add to the misery of the couple and waste the court's time, they said. Hence, it is best to allow the registrar's office to annul a marriage, as it did until 1944.

The majority of those who voiced an opinion on the subject thought both the courts and the registrar's office should be involved.

The court could, in a large number of cases, help to preserve a family if it has not disintegrated completely, or if one of the partners is trying to save it. It is the duty of the court to investigate the situation. Even more important, the court watches over the interests of the children. In cases of mutual consent and no minor children, there is no reason for court action.

Changes were accordingly made in the draft law. The law declares that if both partners agree to a divorce and there are no minor children, the divorce may be granted by the registrar's office three months after proceedings are instituted. The registrar's office will also grant a divorce, unless it is contested, if one partner is mentally incompetent, has disappeared leaving no trace, or has been sentenced to prison for more than three years. In all other cases the divorce must be obtained through the courts. A marriage is annulled if the court finds that it is no longer possible for the partners to continue living together. When the court decides to grant a divorce, it must take the necessary steps to protect the interests of minors or a disabled partner. A husband may not start divorce proceedings without the wife's consent during his wife's pregnancy or during the first year after the birth of their child.

The bitterest debates centered around the question of how to establish the paternity of a child with unmarried parents. According to the Decree of July 8, 1944, the birth certificate of these children was blank where the father's name would ordinarily appear, an embarrassment to both the child and the mother, and an injustice that, of course, had to be corrected.

Some people proposed a return to the situation that obtained until 1944. Children, they said, are not to blame and should not be made to suffer for the behavior of their parents, who should bear equal responsibility for the child. Children certainly are not to blame, others agreed, but that does not mean the law should encourage casual sex relations and the birth of children out of wedlock by making these relations equal to marriage in their consequences. What would become of marriage then? Would it not lose its significance?

There is no simple solution for the problem of unmarried mothers and children born out of wedlock. The state and the law must protect the mother of a child born out of wedlock when there was actually a common law marriage and a family was established. There is no reason to refuse to fix the paternity if the man states that he is the father of the child. If a woman wishes to have a child but for certain reasons does not marry the future father, paternity cannot be established without the joint consent of the parents. Moreover, the fact that science is not yet able to determine the father of a child reliably also has to be taken into account.

All this considered, the bill proposed a sensible and just solution of the problem. The paternity of children born out of wedlock is primarily established by a joint statement of the unmarried parents at a registrar's office. If there is no statement, paternity may be established through a court suit instituted by the mother. The court will take into account whether the father of the child lived with the mother in a joint household before the birth of the child or helped to educate and maintain the child.

The majority approved these proposals when the draft law was discussed but wanted the conditions made broader. Many argued that the bill groundlessly restricted the possibility of establishing paternity even when the defendant himself admitted it.

The Supreme Soviet adopted the view of the majority, supplemented by the provision that in establishing paternity the court should take into account evidence that confirmed admission of paternity by the defendant.

The law does away with the embarrassing blank space on the birth certificate of children born out of wedlock. If there is no joint statement of unmarried parents or a court decision, the birth certificate has the mother's surname entered as that of the father; the first name and patronymic of the father are entered on the birth certificate at her own discretion. In case of the death of the mother or when it is impossible to establish her place of residence, the surname of the father may be entered on the birth certificate at the father's request.

The regulations allowing unmarried mothers to sue in court to have a child's paternity established apply only to children born after the current law went into effect. Some people proposed making the law retroactive. But such a decision would not meet the principle of legal stability and would, to a certain degree, undermine faith in the force of the law. Besides, it would be practically impossible to establish paternity through the courts many years after the birth of a child.

Consequently, the Supreme Soviet did not make the law retroactive. It allowed only one exception. In case of the death of the person who supported the child born before the law went into effect and who admitted he was the father, the child's paternity may be established through the courts.

Time will show how adequate the new law is. It may, of course, raise problems of its own that will require new solutions.

Codes on marriage and the family will be drawn up by the union republics in accordance with the new Fundamental Law. The codes will provide definitions and the details of regulation.

ONE LANGUAGE FOR SCIENCE

BY ACADEMIDIAN AKSEL VERG; DMITRI ARMAND, Doctor of Science (Geography)
YEVGENI BOKAREV, Doctor of Science (Philology)

This article is part of a discussion in the newspaper *Literaturnaya Gazeta* about a world language for science which would make for more efficient distribution of scientific information and facilitate contact between scientists speaking different languages.

SCIENCE is encountering more and more tasks that only direct cooperation among the world's scientists can solve. Research within the framework of the International Geophysical Year and the International Biological Program, study of the Antarctic, collaboration in the fight against cancer, and space exploration require an exchange of information in many languages.

In every country patents are compiled in the state language, a total of several dozen languages. There are now more than thirteen million patents, and the annual increase is three hundred thousand. Comparing them has become an exceptionally involved problem. Besides the language in which the patent is compiled, a specialized terminology is needed.

A knowledge of the main European languages no longer enables a scientist to keep up with world scientific literature. For example, almost all the scientific periodicals put out in Japan are in Japanese. The socialist countries publish material in their own languages. An attempt to summarize material on the climate of Africa required a knowledge of twenty-five languages, and not all the languages spoken on that continent have alphabets. It is safe to predict that the proportion of publications in English, French and German will drop within the next few decades as those in Japanese, Hindi, Arabic and Swahili increase. What is a specialist who does not know these languages to do?

We can imagine a perfected system of information that would allow every specialist quick access to the information he needs in his native language. But this method would lead to an extraordinary increase in the number of translated publications. The Mir and Progress publishing houses put out books translated into Russian from forty-three languages and translate from Russian into thirty of the world's main languages. Very little scientific literature is translated from the Russian, however. It does not pay since the number of specialists in a given subject is not large in each language, and the editions, therefore, have to be small.

The main stream of scientific information comes through periodicals and journals. There are about four hundred abstract journals published in the world that in some way reflect scientific and technical information. In addition to sixty-three specialized information organizations, Moscow has three central information organizations and the USSR Institute of Scientific and Technical Information (VINITI), the largest in the world. Literature from one hundred and eight countries in sixty-four languages reaches this institute. Some two thousand five hundred employees scan more than fifteen thousand foreign journals, then pass them on to twenty-two thousand free-lance abstract writers. The institute processes almost one million articles a year. Yet the institute does not handle literature on construction, agriculture, medicine or the humanities.

The processed information is not distinguished for its exactness since each publication goes through from six to eight operations: classification, translation, summarization, editing, etc. This is a typical example of multicontact processing. The summary of the errors made at the different stages in the processing leads to information losses or, in cybernetical terms, to information entropy. The errors are numerous since it is impossible to find translators who are experts in ten thousand narrow fields.

Information is slow to reach the consumer. The abstracts of the Institute of Scientific and Technical Information reach the reader in from five to twelve months, while the complete works sometimes take all of three years after the original is put out.

Nor are oral translations any easier. The Palace of Congresses in Moscow is equipped for simultaneous translation in twenty-eight languages. But at best you get no more than six or seven translations. There are no translators for the other languages. And during the question answering part of the discussion periods, the earphones produce only scraps of highly distorted phrases.

It really is strange, says John Bernal, to see a large number of people gathered at a scientific conference who are dressed alike and look alike and whose thinking and knowledge cover almost identical spheres of knowledge, but who are completely incapable of communicating with each other and have to have interpreters. A radically improved means of communication must be developed, says Bernal, especially now that the world is becoming an interacting complex in which the Babelic jumble of languages is a serious hindrance.

Unlike Bernal, most scientists prefer the traditional solutions. G. A. Boutry, General Secretary of the Abstracts Bureau of the World Council of Scientific Unions, has proposed a convention under which every book or article would be annotated in the four main languages—English, Russian, French and German. Such a provisional agreement is possible, but why only four languages? Spanish, Japanese, Arabic and Hindi should probably be added to these.

Success in the diversified applications of computers led to the idea of using them for machine translations. Norbert Weiner, the father of cybernetics, who spoke thirteen European and Asian languages, warned of the complexity of the problem. He was afraid, he said, that the boundaries of words in the different languages were too diffuse . . . for any sort of semimechanical method of translating to be promising. Weiner thought that mechanizing a language at the present time was premature.

The task really is very difficult, particularly in building models of the source and target languages. Every grammar is made up of hundreds, sometimes thousands, of rules of spelling, morphology and syntax. From the logical viewpoint, these rules are to a significant extent absurd. Russian spelling, said Academician Victor Vinogradov, abounds in "contradictions, unjustified survivals . . . and instances of debatable or dual spelling." As a result, electronic computers turn out a half-finished product after years have been spent compiling machine dictionaries in some narrow field. Their translations have to be edited by someone who knows both the two languages and the field of knowledge. Translating machines will have to be extremely complicated if some sort of satisfactory result is to be obtained. As a way of overcoming the language barrier in science, this method is not likely to be effective for a long time.

Perhaps we should go about it in another way and try to teach specialists all the main languages. That is hardly feasible. Our secondary schools manage with great difficulty to assign seven hundred and fifty hours a year to a foreign language. To this schools of higher education add two hundred and ten compulsory hours and one hundred and fifty optional hours. But we believe about five thousand hours are needed to learn only one language so that it can be used freely. No wonder college graduates often have difficulty understanding a scientific text, even with a dictionary. It is ridiculous to speak of high school and college students learning several languages.

Evidently it makes more sense to reduce the problem to just one language, to agree on one national or international language and publish all scientific writings in it. Publication in the national languages could be continued, of course.

However, there are many reasons why using a national language as a world scientific language will not do. Here are two of them. First, the country whose language has become a world scientific language would be in a privileged position. Its scientists would not have to spend from three to five years learning another language and could give the time saved to science. Hundreds of millions of hours of working time would be saved, and the country would be able to forge ahead much more rapidly. Second, it would have big opportunities for economic and ideological expansion. Specifications, prospectuses, catalogues, advertising, newspapers and the radio would follow in the wake of scientific papers. That would give the country tremendous political advantage. Other countries would never agree to this.

There is only one way left that seems to us expedient, and that is to take an artificial language, or rather a regulated language based on a logically constructed grammar and, as far as possible, an international terminology as an auxiliary language of science. It could be introduced into usage in the following way.

The first stage in the sphere of scientific information would be an obligatory summary in the common language of science. The scientist would compile it himself in his native tongue or, if possible, would translate it. This would guarantee the accuracy of the summaries. The publication of summaries on cards appended to magazines or books is already practiced by a number of foreign publishing houses. Annotation of articles by the authors in the Russian language is widely practiced in the Soviet Union.

At the second stage it would make sense to publish scientific literature in both the native language and the language adopted for international scientific communication, or perhaps only in the latter. This would make practicable the publication of research done in narrow fields (most research is in just such fields today) since editions would be several times larger.

We may be accused of proposing a return to the time when Latin predominated in science. What is new, we know, is often something that has long since been forgotten and then is rediscovered. But scientific development proceeds in a spiral, and if something is repeated, it is repeated at a qualitatively different level. Latin is hopelessly obsolete, but the idea of using a single language in science, and a neutral one at that, is undoubtedly sensible.

The world has accepted such means of communication as the sea and air codes, Arabic numerals, musical symbols, medical terms and mathematical and chemical formulas. Are we going to fail to unify the connecting links between these symbols—link words, suffixes and grammar rules?

Courtesy of Literaturnaya Gazeta

COIN A ? CAPTION

We thank those readers who sent their suggestions regarding possible captions for the photograph, appearing in the August issue, of the photographer who is closely followed by seven little piglets.

Our Coin a Caption photographs have brought much amusement to both our readers and our staff. Our final choices were most difficult to make, depending on one's point of view—either hindsight or foresight, so to speak—so we have chosen several. We hope you will agree with the selection that follows:

When do we get the prints?
J. C. Scanlon
846 Monroe Avenue
Elizabeth, N.J

Keep an eye on him, remember he promised us prints!
Julius Rensch
619 Pondella Road
North Ft. Myers, Fla.

Seven little piglets follow with glee
The man with the camera, plainly to see.
But does he hide a piggy snack to lure the little band?
Turn around, dear man, and bare what you hold in your other hand.
Heidi Monk
P.O. Box 415
Concord, Calif.

Animal Farm .
Susan Chaffee
31 North Mast Road
Goffstown, N.H.

Pignip .
J. W. Sampier, Editor & Publisher
Live Stock Producer
155 North Wacker Drive
Chicago, Ill.

A 'hamstrung' caucus .
Rosemary Johnson
1508 Madison St.
Chillum Heights, Md.

Hey mister! Take our picture, or *"Seven after one."*
Mrs. Zena Druckman
2976 Clay St.
San Francisco, Calif.

Hold it kids, if you were dressed decently, I would take your picture .
Mrs. Lorin M. Temple
107 South 6th St.
Millard, Nebr.

Wiggly Pigletts
Mr. Russell Jacob
1577 Thompson Drive
Bremerton, Wash.

Straighten that line up!
Mr. Harry Schulte
7003 Glenmore
St. Louis, Mo.

Follow the leader", or *"Seven Up* .
Mr. Gorgas Bechtel
8205 Gladstone
Philadelphia, Pa.

The Pigleted Pied Piper , or *All Road Lead to the Pigpen* .
Mr. & Mrs. E. Aguirre
7801 West Chester Pike
Upper Darby, Pa.

Wagging their tails behind them .
Carolyn Stevens
4412 West Lake Harriet
Minneapolis, Minn.

Ham Actors Hitting the Road .
Mr. Charles E. Sharp
553 Whitney Avenue
Akron, Ohio

LETTERS TO THE EDITOR

Dear Sirs:

As subscribers to your periodical we would like to know if you have published or plan to publish any cumulative indexes?

San Francisco Public Library
Civic Center
San Francisco, California 94102
Att. History Department

In every December issue you will find an insert which is the index to all articles published in the course of the entire year. Editors

Dear Sir:

I have been a fascinated reader of *Soviet Life* for some time, congratulations on a fine magazine. As a Professor of Classics (Greek and Latin) I have an obvious interest in the status of classical studies in the USSR—would it be possible for *Soviet Life* to treat this topic in some future issue?

Sincerely yours,
Theodore F. Brunner
Chairman
Department of Classics
University of California
Irvine, California

Mr. Yuri S. Fantalov
Editor in Chief
Soviet Life
Pushkin Square 2
Moscow, USSR

Dear Mr. Fantalov:

The caption below the picture of myself and Reverend Ilya Orlov, *Soviet Life*, October, page 4, top right, is undoubtedly the result of a misunderstanding and requires an immediate disclaimer.

I am not a Baptist. As a Protestant interested in seeing the largest Protestant church in the Soviet Union, it had not occurred to me to mention my own religion. I am now of the Unitarian belief.

We were in the church almost an hour and Reverend Orlov, a lay preacher, who besides being a practicing dental surgeon is a self-taught organist, played several hymns. My pleasure at hearing two very familiar tunes may have given the impression that I sang, but I did not.

Reverend Orlov also told me that the women, seen in the photograph, are elderly pensioners who come for the first service and stay through the second in order to visit with their friends.

Two hundred new members were baptized in 1967. The Soviet government recently allotted to the church the materials to build a balcony which has increased the seating capacity to 1,500. The Seventh Day Adventist congregation of Moscow uses the church two nights a week.

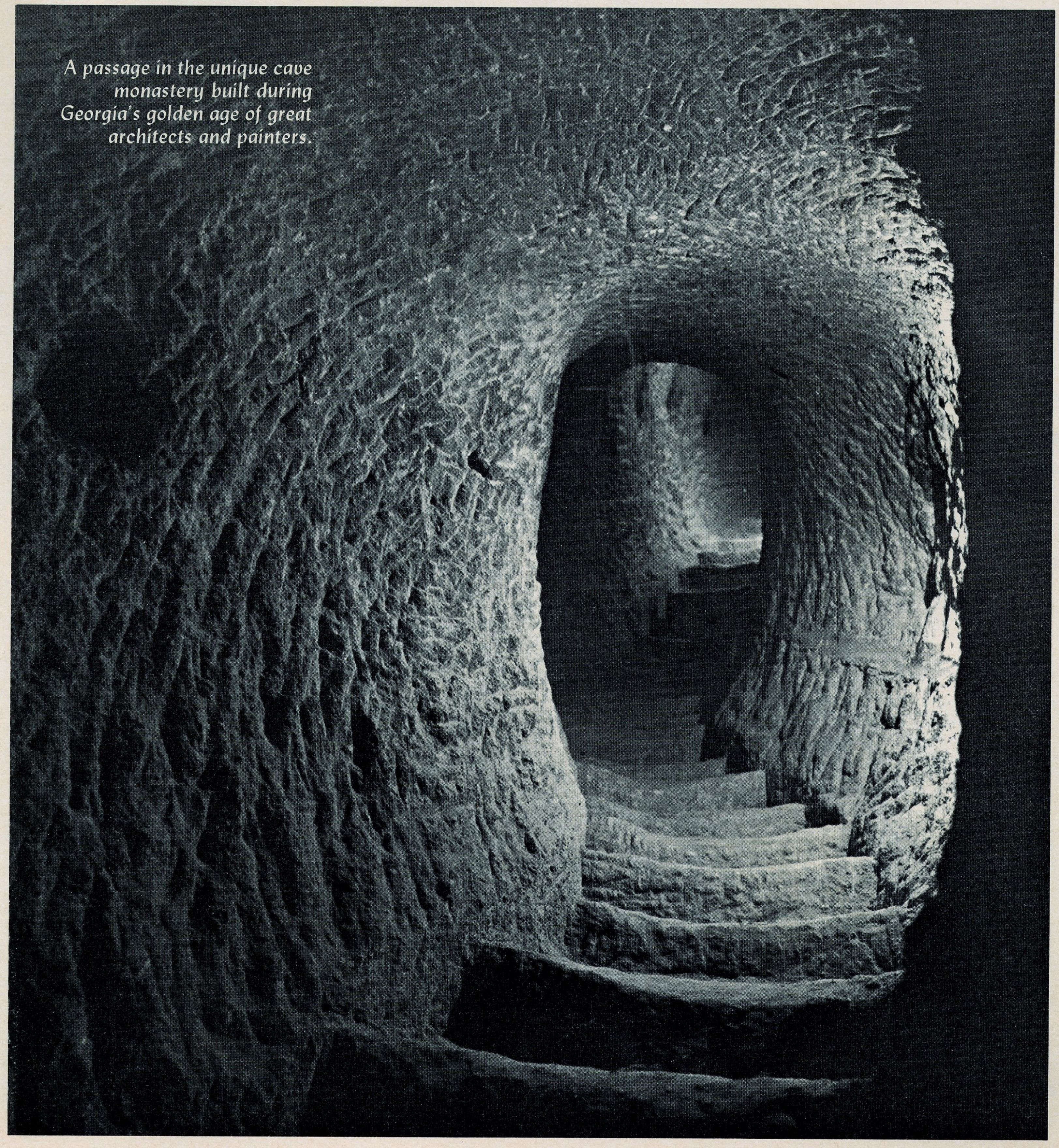
I would be pleased if this letter could be printed in the letters column of the next issue of *Soviet Life*.

Sincerely yours,
Mrs. Sybil Ramsing
Clinton, Connecticut

VARDZIA

CAVE TOWN OF THE 12th CENTURY

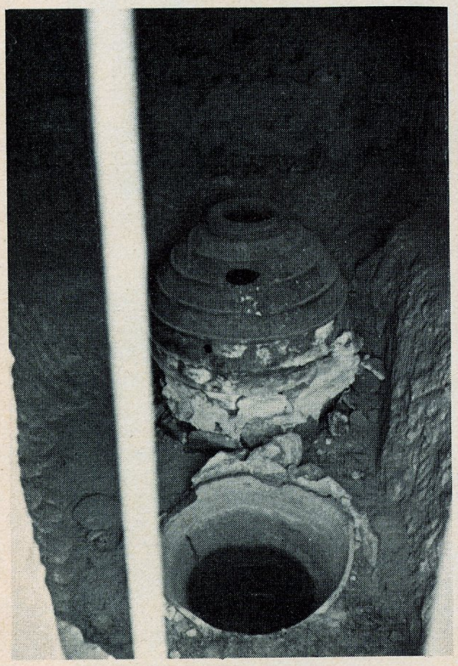
PHOTOGRAPHS BY SERGEI ONANOV, ISAAK TUNKEL



A passage in the unique cave monastery built during Georgia's golden age of great architects and painters.

Against the majestic background of the Caucasus the eight-hundred-year-old monastery looks almost like a setting for an epic play.





From time immemorial Georgians have kept their wine in such great pitchers underground. It helps to preserve the bouquet, they say.

THE DARK CLEFTS in the white wall are entrances to a complete town cut into the vertical mountainside. Vardzia is Georgia's famed cave monastery. Several hundred caves for living quarters and auxiliary premises, extending for over half a mile, were hewn in tiers into the cliff. The creation of Vardzia dated from the twelfth-thirteenth centuries, a flourishing period in Georgian history. It was then that the Arab conquerers were driven out, the isolated principalities reunited and a strong and integrated state established. The economic and political changes brought an extraordinary flowering of Georgian culture, an age of great poets, architects and goldsmiths. Shota Rustaveli's epic *A Knight in Tiger's Skin* anticipated the Renaissance by a whole century.

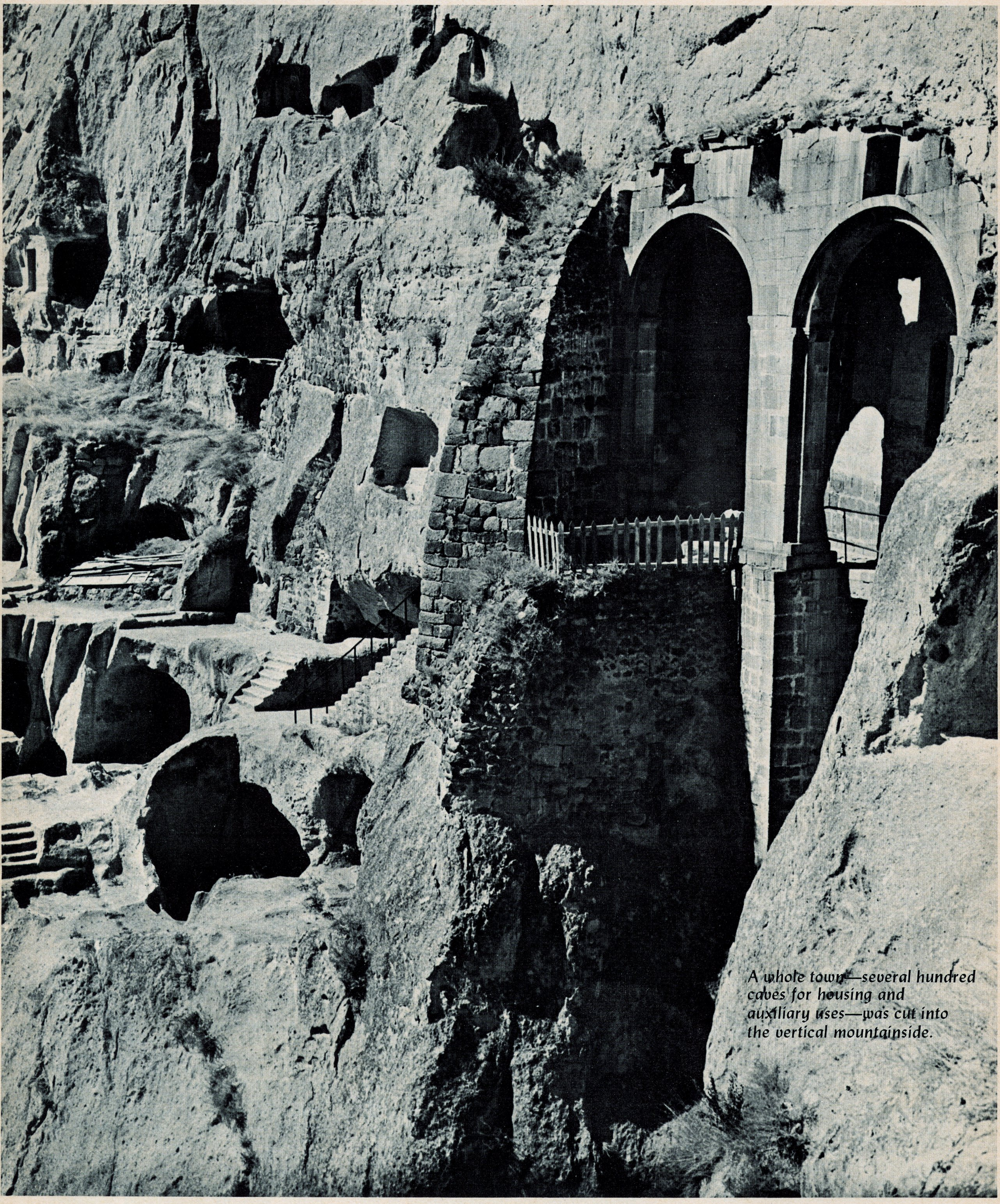
Monumental painting also reached a high point. Church walls and vaults were covered with frescoes. The architecture having some features in common with the general medieval pattern of other Christian countries—Byzantium, Armenia and the Roman influenced countries (Georgia was converted to Christianity in 337)—at the same time retained a pronounced originality of its own.

The main, hall-type temple of Vardzia is located in the central part of the monastery. The box-like vault, pilasters and supporting arches are all hewn out of the cliff. Against the almost universal background of domed churches, Vardzia is an exception for Georgia where there is only one other architectural structure of this kind. The interior of Vardzia's main temple is decorated with frescoes depicting King George III and his daughter, Queen Tamara, who inherited the Georgian throne. It was during their reign that the cave monastery was built.

Legends cluster around Queen Tamara, who ruled from 1184 to 1213. She was distinguished for her wisdom and beauty. Queen Tamara brought domestic peace to Georgia, ended abuses by the rulers and strengthened the state. She waged successful wars against neighboring countries, defeated two sultans, conquered a number of towns and extended her possessions. She spread Christianity to the Caucasian mountain tribes and was subsequently canonized. Tamara's reign was famed for its men of letters, among them the great poet Shota Rustaveli. He was hopelessly in love with the Queen, the reason he wandered for years in countries other than his own. His love for Tamara is supposed to have inspired his immortal epic.

The town of Vardzia testifies to the age of Georgia's stonework tradition. All of its ancient monumental structures are built from rock. Rock architecture reached its peak in Georgia in the Middle Ages.

This comparatively small Transcaucasian republic (area only 29,500 square miles) has about 5,000 architectural monuments, most of them of church origin. These monuments, including the Vardzia Monastery, provide a history of the development of 1,500 years of Georgian architecture.



A whole town—several hundred caves for housing and auxiliary uses—was cut into the vertical mountainside.

THE THREE: COMPOSER, SKIPPER, CHEMIST

"Tell me about the happy people," is how Svetlana Petrova begins a letter to the editor. She is a student in a Moscow high school, which offers an intensive course in English, and is a regular reader of ours. After we thought about it, we realized that her request was not simple because after all is said and done, everyone has his own notion of happiness. Perhaps there is still one common element: Are you doing the work you like? Here we have a skipper of a fishing trawler, a chemist and a composer. They are all under 30. What else do they have in common? They like their jobs. Not everyone does. That is why we think these accounts may serve to answer Svetlana in some measure. They were taken from different youth publications: the *Yunost* (Youth) magazine, the newspaper *Komsomolskaya Pravda* and the Siberian paper *Leninskaya Smena*.

VALENTIN SILVESTROV:

Avant-Garde Eruption Is Not Unlike the Outburst of the Romanticists

BY IVAN NIKOLAYEV

MY INTERVIEW with Valentin Silvestrov began with the composer playing a tape recording of his chamber work for me. The easiest way, I suppose, for a man who writes music to talk about it is to play it. As the strains of flute, trumpet and celesta floated in the air, I conjured up visions of the intimate world of three beings caught up in a tentative urge for expression. The three movements of the piece could be three evenings spent in front of a slowly burning fire. One narrator at a time tells his tale, while his two companions listen with sound, as happens only in music....

The scores I heard were provocative and novel. But the new techniques were so utterly unobtrusive, that it was the simple charm and ingenuousness of the music that affected me most. I told this to the composer.

"It is what I aim at," replied Silvestrov. "An ease of expression that is nevertheless new and striking, that can be appreciated by a public that is not unwilling to accept the unaccustomed. And that takes time. It took time, too, for us to learn to appreciate Beethoven and, in the process, to abandon some of our pet prejudices. The ingenuousness I aspire to is coming to musical terms with my own personality."

Silvestrov spoke of the evolution of twentieth century music—from the cosmic flights of Scriabin, through the neoclassicism of the 1920's and 30's, down to the modernistic trends appearing after World War II. These trends, distinct from one another in their aims, aspirations and style, are nevertheless, he said, grouped under the general heading of avant-garde. For all its heterogeneity, there was thus a certain coherence, a common point of departure about this movement. It simultaneously thrust upon the world "concrete" music and "electronic" music, and produced such eminent composers as the Italian Nono, the German Stockhausen, the Frenchman Boulez and the American John Cage.

In developing his point about this common feature of the avant-garde, Silvestrov said:

"Apart from the destructive influences, rightly and wrongly ascribed to it, avant-garde music should be credited with the attempt to probe the origins of musical style, genre and traditions, with the effort to trace, for example, waltz rhythms to the gestures from which they spring. We are used to forthright and tonal music because we have been brought up on it. We accept patterns that our logical perceptions can pigeonhole. To write "tonal" music and stick to "harmony" is certainly the easiest, but hardly the most creditable track for the composer. It may very well lead him into the stagnant waters of inertia. Avant-garde at its best defies the inertia of compositional thinking."

"And does atonal music result from this defiance of the inertia of tonality?"

"No, this widespread term is really a misnomer. There is no such thing as 'atonal' music, but a new tonality resulting in a new expressive medium. Debussy noted that composers carried away by technical showmanship do not truly project their innate gifts. His own music with its scintillating evocative juxtapositions is a study in cogency and tangibility.

"Avant-garde music, too, abounds in 'Debussyisms,'" continued Silvestrov. "They may offend the unaccustomed ear, but within the range of the specific style are not incongruous. Like the cries of birds or the rustle of leaves, they grow out of a void of sound and are less jarring, for example, than the strains of a transistor outside our window.

"For centuries music was confined to the bounds of cathedral space. The avant-garde is one of a number of efforts to break through these limits. These efforts lead us to a closer affinity with oriental musical conceptions. Oriental music, as far as I can judge, has succeeded to a greater extent in remaining within natural bounds. An oriental piece of music, unfettered by finiteness, goes on swelling and expanding like a rolling snowball. Romanticism in its own way tried to overcome the space barrier. As an attempt to break through the present confines, the eruption of the avant-garde is not unlike the outburst of the romanticists...."

Silvestrov spoke enthusiastically of the work of many of his fellow composers and of contemporary music in general. In recent years he has himself written several important compositions, among them two symphonies—*Mystery,* for alto flute and six groups of percussion instruments, and *Projection,* for clavichord, vibrophone and bells. His music is becoming known internationally, played to audiences in Prague, Zagreb, Berlin, Paris and Copenhagen. *Spectres,* his composition for chamber orchestra, was a great success in a recent Leningrad performance, for which the composer says he is largely indebted to Igor Blazhkov, a fine conductor, friend and understanding interpreter of his music.

"My *Spectres* was first conceived as incidental film music but has now been launched on a life of its own. When we finish a score, it leaves us like a grownup son to make its own way in the world...."

Courtesy of the magazine Yunost

ANDREI PRIY:

The Test of Authority

BY TATYANA AFANASYEVA

WHEN I WENT to Tallinn to interview Andrei Priy, I knew he was the skipper of a fishing trawler with a fine record and that he had won the Young Communist League Badge of Honor.

I wouldn't have taken him for the master of a ship that sails the North Atlantic, at the top of the globe, for long voyages. He didn't fit my picture of a skipper. He looked more like a student than a "sea dog."

Andrei Priy is 25, but you take him for less until you talk to him. Then you take him for more. He has the mature judgment of a man twice his years, a man with a long background of experience. He has none of the affectations of the "sea dog."

His men respect him, they like working under him. You wonder whether this is a natural quality he has—this rare ability to lead.

One of the acid tests life puts to a man is authority. At 21 Andrei first sailed as master of a ship. As he put it: "I replaced the captain for one trip only." Maybe it was just luck. But luck favors many. It depends what a man does with the chance. And here was a boy commanding people older than himself. On his skill and judgment depended their work, earnings and even their lives. At sea the skipper is the last authority. What he says goes. Men with experience grow dizzy with power or frightened of responsibility. A young master can either insist upon his own "style" or follow the lead of the more experienced sailors under him.

Andrei managed to avoid these extremes. He listened to what the men had to say, saw how other skippers acted and worked out his own formula. There was always a voice inside cautioning him not to be a "boss." He saw that men were overawed by "bosses," even respected them, but never liked them. At the other end was the "buddy-type," chummy with his crew, but never their leader. The men were easy with him, but he didn't have their respect. Andrei chose a different course: As a captain he never forgot what it was to be a seaman. That attitude came through to the men when he gave orders, it was understood and appreciated.

To Andrei it was nothing more than being himself, being a decent person.

And so he passed the authority test. But there is an equally formidable test—the success test.

I asked him: "Aren't you afraid of success?"

"No," he said, "because I know myself. I believe in self-knowledge. I think a man should know his potentialities."

"And what place has your self-knowledge assigned you?"

"The place and position I have now. Recently they wanted to promote me to a bigger vessel with a crew of nearly a hundred men and better conditions. But I turned down the offer."

"Why?"

"I knew what the job involved. To do it properly would leave me no time for anything else. And I thought that was wrong. A man must leave himself time for a personal life. He must be able to appreciate art and books. He must have time to think, because he is a human being and not a machine."

I couldn't help agreeing. Andrei was in charge of men, which meant that he had to have time for everything, for science and the arts and for ethics. And to "reproduce" his spiritual strength, he had to have time for himself. To lead and guide men you must not only keep up with them, but be a little ahead. This is what generally characterizes a leader and an intelligent person.

Tolerant of other people's convictions, Andrei does not sit on a fence when it comes to his own point of view.

You will hear the sailors say: "The skipper has guts." You might think this was self-understood, that courage is something you take for granted in a sailor. But it is possible for a skipper not to be afraid of the sea and yet be afraid of his superiors, of change and innovation. To earn a reputation for "guts" among sailors is something.

Andrei's is a personality that combines "extremes": strength of character with a good mind, risk with calculation. He will excuse weakness, but not evil. He analyzes other people and himself as well. In short, he has the qualities that make up a spiritually whole man.

Courtesy of Komsomolskaya Pravda

YURI KRYAZHEV:

Blaze Your Own Trail!

BY STANISLAV ILYIN

HAVING PRESENTED his master's thesis on "The Synthesis of Grafted Copolymers" in 1963, three years after finishing college in Moscow, Yuri Kryazhev applied for the job of chief of a laboratory of high-molecular research at the Irkutsk Institute of Organic Chemistry. He got the job. The average age of his staff was twenty-five and the institute itself was only six years old. It is headed by Professor Mikhail Shostakovsky, Corresponding Member of the USSR Academy of Sciences, and one of the country's leading specialists in acetylene chemistry.

After three years' work Kryazhev became deputy director of the institute.

"Kryazhev's growing on the job," a local wit commented on the promotion to everybody's amusement. Kryazhev at over six feet was by far the tallest man around.

But whatever wisecracks greeted the news, nobody at the institute argued the fact that Kryazhev had the best claim to the job. He had proved himself not only a knowledgeable and gifted researcher, but also a brilliant and able organizer who knew how to pick his people, tackle the right problems and guide his staff.

"There are two directions a researcher can take," says Yuri, "follow up a problem that has already been worked on, or explore a new field.

"I prefer the second. Researchers who choose the first get quicker results and meet with fewer setbacks and disappointments. I suppose I could have worked in the field of cellulose, gone on with grafted polymers and followed well-tested roads with the usual good prospects. But I wanted to do some real pioneering, and that brought me to Siberia, as it did Anatoli Polyakov, a fellow student who presented his master's thesis the same day I did. Anatoli is now in charge of a research lab at our institute.

"To my mind the young researcher with some experience in his field and enough confidence to feel that he can strike out on his own should not be content with following paths traced by others. He should go to a research center like ours in Eastern Siberia where everything starts from scratch. When I came to Irkutsk most of our labs were empty, and there were only five others besides myself on the staff. Today we have a staff of thirty-two and first-rate equipment. Three of our people will be presenting their master's theses this year.

"Young scientists have a great future in new research centers like ours where they can choose the problems that really interest them and make the most of their gifts. The fact that so many of our researchers are young women throws a monkey wrench in our work; the birth rate in Siberia is way up. I'm just fooling, of course. But two of our young women working on important problems have just had babies, and the babies have not helped to solve problems. As head of the laboratory and now deputy director as well, I suppose I ought to find this upsetting. But as a young father myself, I'm happy to welcome these additions to our community."

Courtesy of Leninskaya Smena

WOULD D'ARTAGNAN RETURN?



BY LEONID LIKHODEYEV

Drawing by Alexei Tertyshnikov

WHEN THE GASCONY BOY, whose name was d'Artagnan, reached the age of 18, his dad told him it was time to start out on his own.

Papa took a sheet of good paper and wrote a letter to an influential fellow countryman of his who served as a captain of musketeers in the city of Paris. Papa asked this influential friend to use his good offices to find the boy a job in the capital.

D'Artagnan took the letter, said "So long!" to his father and set off for Paris. But he had scarcely left his parents' home when the letter was stolen. And we must say that even in those days it was hard to get a position in the capital without pull.

What was a clever youth to do when the prospects were so poor? He should have immediately returned home and said to his father: "Papa, don't get excited. They stole the letter. Write me another!"

A fellow I know suggested this same solution to me. He, too, was 18 years old and had read all the romantic books in his new library.

I was surprised.

"If d'Artagnan had followed your suggestion, there would be no story."

"Maybe so," he replied. "But there would have been a new letter, and d'Artagnan would not have had to risk his life."

I wondered how Papa d'Artagnan would have greeted his son. Papa d'Artagnan was a soldier and a man of strict rules. He would probably have disowned him. He would have turned gray with shame that his own healthy lout of a son could not take a step without somebody's help, that all his son could do was talk a romantic line.

But no matter how he would have reacted, one thing is sure, we would not have had that amusing, romantic book by Alexandre Dumas *The Three Musketeers.* Because a fellow who turned tail when the going went a little hard would certainly not make a good musketeer, and who would want to write about him? And not only would he be unfit for musketeering; he would not be any good as a geologist, a miner, a chauffeur, an engineer, a cosmonaut, a doctor—or anything else.

And so we can draw the conclusion, from this very ancient example, that if a young fellow is not confident of his own powers, if he lacks persistence and independence, no letters that papa may write will help him. On the contrary.

This well-read fellow I know is by no means a coward. He probably has good inclinations. But he is too sober-minded, too calculating for his eighteen years. His interests are too practical and his views too utilitarian. The uninspired grow up like that. To be romantic does not necessarily mean going around looking for heroic things to do. It is nothing so exalted. It is simply the good feeling you have when you rise above your own consumer reflex, when you push out beyond the ordinary, make a lunge for the extraordinary.

And this feeling begins with a simple ability—the ability to cross the threshold. It makes no difference which threshold you step across—your parents' home, the threshold of your own knowledge, the boundary of your curiosity, the fence of narrow-mindedness or the paling of dogma and canon. And jumping the obstacle, you must never think, "What do I stand to gain from this?"

One of our great fliers, Valeri Chkalov, once flew under the girder of a bridge on which his sweetheart was waiting for him. His superiors were absolutely right when they put him in the guardhouse. But they were also proud of him for the crazy stunt.

Of course he could have traveled to the bridge by streetcar without risking his life. But he was in love, and he never thought about the danger.

"What did he gain from it?" the supercalculating person will ask.

What should he have gained? And why must we look at everything a person does from the viewpoint of what he gains?

What does that young man who brings his girl friend the first snowdrop gain? The first snowdrops grow in the woods where one can catch cold. And why should one bring snowdrops to a girl anyway? Can't a person get married without them? People do.

Let them. . . .

One great actor asked his students, "What does the flight of a bird begin with?"

"What do you mean—begin with? It begins with the bird spreading its wings."

"No, you're wrong. The flight of a bird begins with its wanting to fly."

What about your wings, friends? What about your ordinary striving for the extraordinary?

They say there are particularly romantic vocations. Vocations that mean leaving one's home town fall into this category—geology, navigation, road building. These occupations do meet the main romantic conditions, the step across the threshold. But that is merely the external form of the romantic, its garb.

There are no romantic occupations. But there are people with romance in their souls, and people who know "what they will gain." And the latter will, in the most romantic of romantic places, accumulate money because they are not romantics, but self-seekers.

Of course, d'Artagnan is d'Artagnan. He is a literary figure, a symbol. We look at him and think that ours is not a romantic age. Captains as weather-beaten as the cliffs have already discovered all the archipelagoes. The black hearts of villains have already been pierced with swords. The enemies who merited punishment have been hurled into the abyss. But did that fellow who, during a storm, rushed to make firm a girder that was dangling between heaven and earth think, "What will I gain from this?" Does the young man who makes his way across the tundra on skis to perform an operation think of anything except getting to his destination as quickly as possible?

Romance sharpens the emotions. Its noble hero is infinitely honest, bold, courageous, loyal and always ready to pierce the so-called romantic scoundrel with his sword, hurl him into an abyss—or raise his voice at a Komsomol meeting when he disagrees. Although we do not often come across romantic scoundrels, there are still many of them around, and we would like to put an end to them as quickly as possible.

But if we want these feelings to be more intense, we must first see to it that they exist. And that means absolutely concrete talk about actions, values, the urge to be of use to one's society. Romance dies when there is no feeling that you have risen above your consumer reflex. That is when the romantic scoundrels who are still around begin to multiply, to pretend, to adapt themselves. They come out of the books and crowd about in doorways, their low foreheads shortened by forelocks. They slyly trip someone up, and five of them, together, attack one person. They are tickled if there are no d'Artagnans to make them unwelcome, if the d'Artagnans have gone back to their father's house for a new letter of recommendation.

Quite different d'Artagnans make life move ahead—poets for whom soup is food, not the aim of life. They unsheath their swords and bare their chests because they have that compulsion to rise above the ordinary.

If we crush this feeling, then great music, great paintings and great books will all go to the dogs, because instead of a dinner menu, they will have only a sense of the beautiful to offer.

And instead of music and painting and books an indifferent muzzle, one that is satisfied with its mind and dissatisfied with its dinner, will shove itself forward, hiding the sun and stars from us.

The d'Artagnans do not return. They leap forward to meet the unknown, and they are not afraid of it; they attack it and rise above it, seeing it with wide-open eyes.

They wear no armor. Their chests are bared to both friend and foe. Because they do not pity themselves, they do not hesitate to cross the threshold and, what is most important, they do not regret living in this world.



Students favor the saying that life is a striped mattress: The dark stripes are invariably followed by light ones. You hear it a lot around winter exam time. In all Soviet institutes the last exam day is January 28. But no one in his right mind would wait till then to book a seat on a plane or train headed for the mountain ski resorts in the Caucasus, Transcarpathia and Karelia. Nor is it easy to reserve a seat to any other place, not when eight million students, driven by the centrifugal force of youth and curiosity, leave town at the same time. We haven't the space to list all the winter holiday possibilities, but the statistics say that 40 per cent of the students go traveling around the USSR and abroad while 35 per cent spend their vacations at resorts, which become solidly student for the duration. The trade unions cover most of the bill. For a two-week stay the student pays only ten to twelve rubles, a third of what factory and office workers pay. Fifteen per cent stay in their dorms and make the rounds of theaters, concert halls and museums, and 10 per cent visit their families in the villages or in other cities.

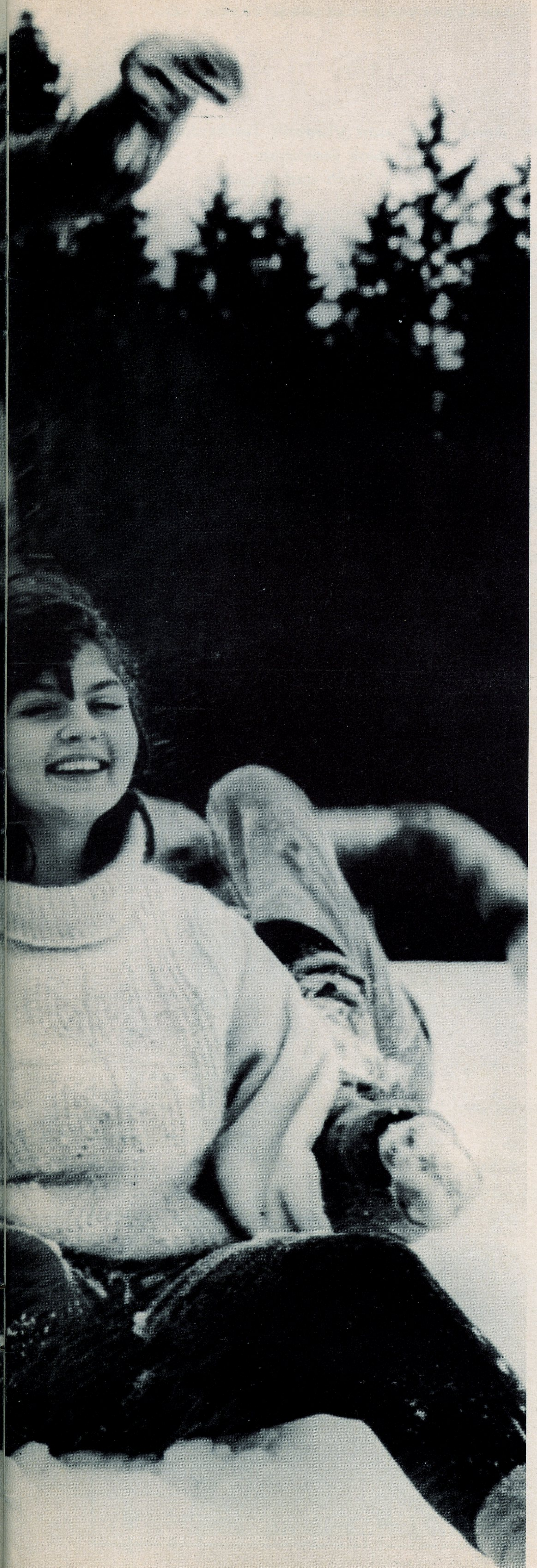
STUDENTS' WINTE



R VACATION

After an endless, bottled-up half-year of study, just walking down a village street behind an accordion or taking a sleigh ride is excitement.





Many students stay at Sputnik camps. These pictures were taken at the Sun Valley Camp in Bakuriani, a winter resort area in the Caucasus.



The Sun Valley Camp has every facility you can think of: a fine rink, good slopes, the right kind of company to have fun with, and it's cheap besides.



You can always find a quiet spot for a little romancing if you have a mind for it, even in crowded Bakuriani during this busiest season of the year.

LEISURE TIME IN THE USSR AND THE USA

How Young People Spend It

By Anna Pusep and Vladimir Turchenko
Novosibirsk Sociologists
(from the book *Youth and Socialism*)

LEISURE TIME AND HOW IT IS SPENT is an important index of a society's progress. In 1965 UNESCO made a survey of the time budgets of urban groups in 11 countries—Belgium, Bulgaria, Hungary, Peru, Poland, the USSR, the USA, France, the Federal Republic of Germany, Czechoslovakia and Yugoslavia.

The cities of Pskov in the USSR and Jackson, Michigan, in the United States were chosen for the study.

Table No. I compares the 24-hour time budget of the urban working population under 30 in the two cities.

Relatively, there is not much difference between the USSR and the USA in the amount of true working time and work-related time spent by men under 30 and women under 25. However the difference is rather marked in the case of women between 25 and 29. This is because many American women do not work a full day. At the same time Soviet women, most of whom work a full day, spend less time on home and related chores.

The Soviet workingman has somewhat more leisure time but the Soviet workingwoman somewhat less than their counterparts in the United States. The reason again, in the case of the women, is that American women do not work the full day and they have more home appliances and gadgets.

On the other hand, there is a very marked difference in the way leisure time is spent.

Noteworthy first is that in Pskov men and women under 25 spend on education respectively 2.6 and 11 times more time than the same age brackets in Jackson.

As for the 25-29 age bracket, men in Pskov spend 9 times more time on education than those in Jackson. The American women surveyed spent no time on education at all.

In comparison with their American counterparts, Soviet young people also spend much more time reading. American young people spend between 50 to 100 per cent more time on passive, or idle, rest.

Summing up, the UNESCO study concluded:

Though in the USSR labor productivity is, thus far, lower than in the USA, Soviet working youth have roughly the same amount of leisure time in absolute terms as American young people. Moreover, Soviet men up to 30 have somewhat more leisure time than their counterparts in the USA. In comparison with American youth, Soviet young people on the whole put their leisure time to more rational use. They do much more studying, reading and going to theaters, movies, museums and concerts.

Table No. 1
Pattern of 24-hour time budget of Soviet and American working youth (average hours per day a week)

	AGE							
	Under 25				Between 25 and 29			
	men		women		men		women	
	USSR	USA	USSR	USA	USSR	USA	USSR	USA
True working time	5.8	6.6	5.3	5.4	6.2	5.8	5.6	3.8
Work-related time	1.4	1.2	1.1	0.8	1.3	1.1	1.2	0.6
Time spent on home and related chores	0.7	0.8	2.6	2.4	1.4	1.6	3.7	5.1
Time spent on physiological needs	9.3	9.3	9.3	9.8	9.1	9.7	9.2	8.8
Leisure time	5.7	5.1	4.5	4.9	4.9	4.8	3.2	4.1
Remainder of nonworking time spent otherwise	1.1	1.0	1.2	0.7	1.1	1.0	1.1	1.6
Grand total	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

Table No. 2
How Soviet and American working youth spend their leisure time (average hours per day of week)

	AGE							
	Under 25				Between 25 and 29			
	men		women		men		women	
	USSR	USA	USSR	USA	USSR	USA	USSR	USA
Passive rest	0.1	0.2	0.1	0.5	0.2	0.3	0.1	0.2
Study and self-education	1.3	0.5	1.1	0.1	0.9	0.1	0.4	—
Social activity	0.2	—	0.1	0.3	0.2	0.4	0.1	0.2
Radio listening	0.1	—	0.1	—	0.2	0.1	0.1	—
TV watching	0.3	1.5	0.5	1.5	0.5	1.8	0.4	1.0
Reading	1.0	0.2	0.8	0.5	1.1	0.4	0.6	0.3
In company	0.4	1.7	0.3	1.1	0.5	0.9	0.4	1.8
Talking	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2
Walking	0.8	—	0.3	—	0.3	—	0.3	—
PT and athletics	0.3	0.3	—	0.2	0.1	0.4	—	—
Creative interests	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.1
Shows and entertainment	0.8	0.2	0.8	0.2	0.5	0.2	0.4	0.3
Total leisure time	5.7	5.1	4.5	4.9	4.9	4.8	3.2	4.1

New Year's Miracle

By Gennadi Tsiferov

WHO IS IT? Who is it? It is something knocking ever so gently on my windowpane. Is it a moonbeam? The wind? No, it is crystal butterflies—fluttering blue snowflakes. . . . They beat their tiny wings against the pane and beg me to tell them a New Year's fairy tale. Listen to me, then.

Everybody knows that there are cranks in this world of ours. Only there were far more before, and their eccentricities were far more interesting. In my old town, for instance, there was an old crank who never lighted any New Year's candles.

"What for?" he would say. "When they burn down, everything grows so dark and bleak."

Though everybody around made ready to see the New Year in, he just sat at his window and felt sorry for himself. Mummers passed by on the way to the New Year's carnival with tinkling bells and rattles. But this obstinate crank would not even smile. No, he always spent New Year's Eve in dour solitude. But once . . . listen to what happened once!

Just as the candles were lighted in the neighboring houses, just as the clock struck midnight, somebody knocked on the crank's door.

"That's funny," he said. "Who can it be? Nobody ever visits me." But the door opened and in walked Grandfather Frost himself. Shaking the silvery snowflakes from his sleeves, he looked around in surprise.

"My dear man, where are your candles?"

"Er, you see," muttered the crank, "I'm afraid. . . ."

"Of celebrating New Year's Eve?" Grandfather Frost was still more surprised.

"That's right," nodded the crank. "You see, the candles will burn down, and so will the celebrations, and it will be still darker and bleaker than before."

"You certainly are a crank!" guffawed Grandfather Frost. Striking his golden staff on the floor, he said:

"Celebrations never stop! It's your job to see that one turns into another."

"But I can't," whined the crank.

Striking the floor with his staff a second time, Grandfather Frost said: "If you want these celebrations to go on, you must plant New Year's candles in the spring."

That is what the crank did. As soon as Grandfather Frost departed, he lighted a New Year's candle, and when it had burned halfway down, he put it away in his trunk until the spring.

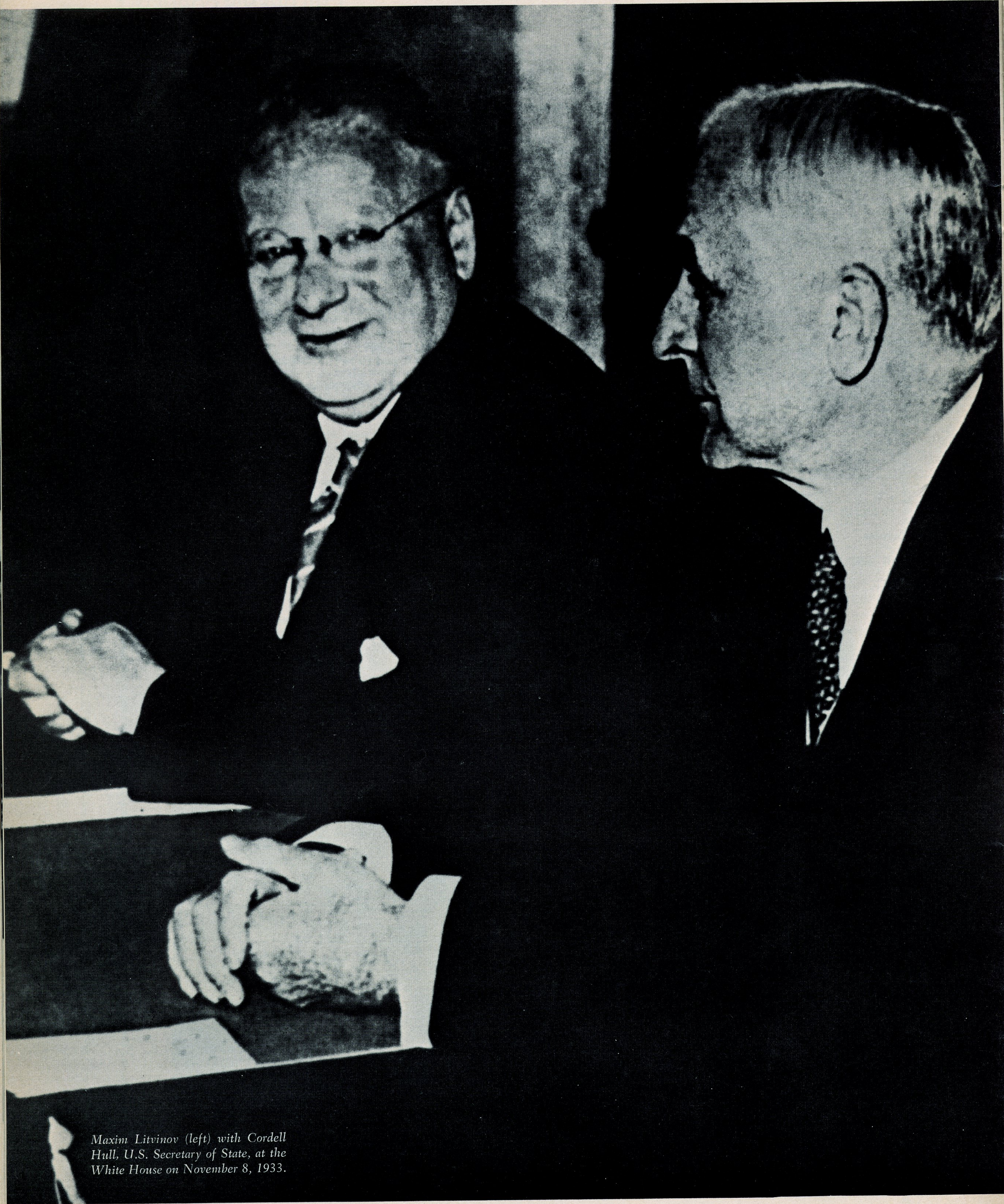
In a large bed of white roses and velvety dahlias—yes, yes, in that bed of silver and velvet—the crank planted his tiny, golden stick of wax. Everybody laughed at him: "What a foolish thing to do." But soon his neighbors gaped in wonder and delight. A beautiful chestnut tree had grown from the little New Year's candle. If you don't believe me, have a look at the chestnut tree yourself. Aren't its blossoms like little white candles? How could they have grown like that? A miracle?

I told the story of this New Year's miracle to the snowflakes. Now it is time for you to light your candles so that nobody will worry that New Year's celebrations will come to an end.

You see, holidays never end. They go on and on. . . .

Drawing by Leonid Sergeyev





Maxim Litvinov (left) with Cordell Hull, U.S. Secretary of State, at the White House on November 8, 1933.

ROOSEVELT-LITVINOV: MAN TO MAN TALK

HISTORY OF U.S.-SOVIET DIPLOMATIC RELATIONS

By Zinovi Sheinis

THE FIRST EXCERPT FROM THE BIOGRAPHY OF MAXIM LITVINOV BY HISTORIAN ZINOVI SHEINIS APPEARED IN THE JANUARY ISSUE. IT TRACED THE POLITICAL AND ECONOMIC BACKGROUND FOR THE INTEREST OF AMERICAN BUSINESS AND GOVERNMENT IN THE EARLY THIRTIES IN THE RAPIDLY CHANGING SOVIET UNION. AMERICAN INDUSTRIALISTS AND BUSINESSMEN VISITED MOSCOW, MANY AMERICAN ENGINEERS TOOK PART IN CARRYING OUT THE FIRST FIVE-YEAR PLAN OF INDUSTRIALIZATION, AMERICAN JOURNALISTS INTERVIEWED STALIN, AND THE UNITED STATES ARRIVED AT THE CONCLUSION THAT "THE SOVIET GOVERNMENT IS STABLE." IN THE AUTUMN OF 1933 FRANKLIN DELANO ROOSEVELT, THE NEW PRESIDENT, DECLARED THE UNITED STATES READY TO RECOGNIZE THE SOVIET UNION.

LONG BEFORE the arrival of the *Berengaria* in New York, the American press highlighted the coming visit of Maxim Litvinov, People's Commissar of Foreign Affairs of the USSR. Both the failure and success of his mission were predicted. All kinds of stories appeared about the Soviet Union and its envoy. Now it remained to be seen what turn events would take.

On board the *Berengaria* Litvinov made his first statement to the clamoring journalists: "I am entering the territory of the great American republic, aware of the honor that has befallen me to be the first to bring greetings to the American people from the peoples of the Soviet Union as their official representative, aware that in a way I am penetrating that artificial barrier which for sixteen years has hindered normal relations between the peoples of our two states. The aim of my visit is known from the published exchange of messages between Mr. Roosevelt and Mr. Kalinin. Now the abnormality of the state of affairs that has existed for sixteen years has been acknowledged by both sides, which have begun to take steps to eliminate it. We all know that this state of affairs brought no good to either side, and the sooner it becomes a thing of the past, the better for all concerned." [1]

"Call Me Freddie"

As Litvinov was walking up the steps of the White House, special editions of newspapers in New York, Washington, Chicago, San Francisco and innumerable other cities and towns were headlining the "historic meeting of Roosevelt and Litvinov as an end to alienation." All other events—the repeal of the dry law and the New York elections—were relegated to second place.

Roosevelt met Litvinov amiably but with a certain reserve, carefully studying his face and manner. With him in the large, cheerless, poorly lit room were his wife and Secretary of State Cordell Hull. Roosevelt sat in a wheel chair, his large, gray head thrown back slightly. He made an effort to get up and meet the guest, supporting himself on the arms of the chair. Litvinov knew that Roosevelt could not rise and hastened toward him. Roosevelt gave him a firm handshake, asked about his trip and said that he was glad to see a Soviet representative in Washington. He inquired after Kalinin's health. Litvinov replied that Kalinin was quite well and had asked him to convey his heartfelt greetings to the President.

When the short visit was drawing to a close, Litvinov handed Roosevelt a gift—a stamp album, which the President leafed through with unconcealed pleasure.

In subsequent negotiations Roosevelt observed the Soviet diplomat closely, looking for those singular traits that many believed inherent in Russian revolutionaries; he could find none. The somewhat ponderous Litvinov was well dressed, calm, methodical and spoke English well. One is led to believe that Roosevelt was perceptive enough to see into the inner world of the Soviet diplomat. When the negotiations were drawing to an end, he said to Litvinov: "Just call me Freddie."

This was not an empty gesture. Roosevelt never permitted strangers to use that familiar name. When Litvinov returned to Washington eight years later, they met on the friendliest terms. Evidently Roosevelt, that keen politician, had a high regard for Litvinov's realistic way of thinking and saw him as a man confident of the justice of his cause, representing a new world which was unknown to the American President.

Claims and Counterclaims

On the very first day of the negotiations, Secretary of State Cordell Hull enumerated the American claims—the various sums advanced by the United States to the Provisional Government of Alexander Kerensky.

Litvinov said that he could add to the list. The credits granted to Kerensky had also been used to buy arms for Yudenich, Wrangel and other czarist generals. This financing of the counterrevolution had brought great suffering to the Russian people. Nor did it reflect the desires of the American people, who did not want such a policy followed. He, Litvinov, was sure that had the American Government then in power pursued the same aims as the present Administration, Kerensky and the czarist generals would not have received those credits. How could the Russians be expected to pay for guns and rifles that were used to shoot down Russians? It would be as unnatural as asking the Americans to repay the money England had spent on the war in America, a war in which the Americans were fighting for their independence. The attitude of the Russian people toward the American struggle for independence had been different. The progressive people of Russia had followed the struggle of the Americans with sympathy. Roosevelt listened with interest, glancing occasionally at Hull.

After a lengthy discussion of the first item, convinced that Litvinov would not compromise, that it had all been settled in Moscow, Roosevelt turned to the second item, suggesting that the first question could be gone into later.

Hull presented a prepared list of claims made by Americans whose property had been nationalized in Russia after the Revolution and said that the United States Government insisted on compensation.

This question was discussed for several days. Litvinov declared that the Soviet Government had counterclaims. During the Civil War in Russia the United States sent an expeditionary force to Siberia under the command of General Graves. The losses inflicted by the intervention far exceeded those Americans had suffered in Russia.

Hull reminded Litvinov that the expeditionary force had been withdrawn. Litvinov pointed out that Graves was forced to leave because he saw that the intervention was hopeless. Litvinov's counterclaim was admitted to be sound.

Discussion of the next problem proceeded with greater speed and ease. Roosevelt wanted the Soviet Union not to interfere in the internal affairs of the United States in any way whatsoever. Litvinov assured the President that the Soviet Union never had any intention of interfering in the internal affairs of the United States.

This question out of the way, the President asked Litvinov whether Americans—the members of the Embassy in Moscow—would be guaranteed freedom of religion and be able to attend the church of their faith.

Litvinov answered that all embassies accredited to Moscow enjoyed that right.

To Preserve the Peace

These negotiations must have had many nuances that will never be known since the participants have long since died. But the fine points are not nearly as important as the final results. Litvinov's most difficult mission was successful. All the enormous work was brought to completion by two short letters that the President and the Soviet diplomat exchanged on November 16 in the White House. Roosevelt wrote:

> My dear Mr. Litvinov:
> I am very happy to inform you that as a result of our conversations the Government of the United States has decided to establish normal diplomatic relations with the Government of the USSR and to exchange ambassadors.
> I trust that the relations now established between our peoples may forever remain normal and friendly and that our nations henceforth may cooperate for their mutual benefit and for the preservation of world peace.[2]

Litvinov, on behalf of the Soviet Government, handed Roosevelt the reply:

> My dear Mr. President:
> It gives me pleasure to inform you that the Government of the USSR is quite willing to establish normal diplomatic relations with the Government of the USA and to exchange ambassadors.
> I also share the hope that the relations now established between our peoples may always remain normal and friendly and that our peoples will henceforth cooperate for their mutual benefit and for the maintenance of peace in the whole world.[3]

Roosevelt congratulated Litvinov and addressed a few warm words to the Soviet Union and its diplomats. Litvinov thanked him and returned the compliment. And they continued the talk in the same businesslike way, discussing the details of future relations, the activity of the American Embassy in Moscow and of the Soviet Embassy in Washington, the possibilities of future trade and what effect this would have on the two countries. And, of course, they talked about world affairs and what was happening in Germany.

The First "Hot Line"

During one of the last talks Roosevelt's aide reported that the

[1] *Pravda*, November 9, 1933.

[2] *Foreign Relations of the United States*, 1933-1938, The Soviet Union, Vol. 2, p. 27.

[3] *Pravda*, November 17, 1933.

American Radio Communications Commission had set up a radiotelephone link with Moscow. The President had a surprise for Litvinov—he asked him to make the first direct Washington-Moscow call in history. Litvinov went downstairs to a circular room where the intercontinental telephone had been installed.

Preparations for the great event were also under way at the Central Telegraph Office in Moscow. When word was received that Litvinov would be at the other end, his family was notified.

Technicians in both Washington and Moscow had worked hard to make the call audible. But as often happens in telephone conversations, the husband and wife said several times over: "Hello, do you hear me?" "Yes, I hear you!" The conversation was recorded in Washington, then broadcast over the radio and has remained as evidence of the event.

Litvinov talked to his wife and then returned upstairs to Roosevelt. The President was leaning back in his wheel chair. He asked how the talk had gone. Litvinov answered that the audibility had been excellent. Roosevelt smiled and said: Mr. Litvinov, such a talk is your best propaganda. When Americans learn that the Bolshevik Commissar has a wife and children, that he is a family man, they will respect both the commissar and his land.

After exchanging letters with Roosevelt, Litvinov spoke at the National Press Club to representatives of America's major newspapers and agencies. The American papers called it the largest press conference of the decade.

The Soviet diplomat made a statement on the course of his negotiations with the President. He said that the peoples of the Soviet Union would receive the news of the restoration of diplomatic relations with sincere satisfaction and stressed that possibilities were now opening up for truly friendly relations and peaceful cooperation between the two largest republics in the world. All honest and peace-loving people, all who were against ill will, suspicion, inimical acts and other abnormalities in relations between peoples would be glad.

The newsmen applauded, then fired questions, and Litvinov felt like a boxer warding off the onslaught of an opponent.

"How will the establishment of diplomatic relations between America and the Soviet Union affect the Third International?"

"The Third International is not mentioned in the documents," countered Litvinov. "One should not ascribe to documents what they do not contain."

"Are not the Russians spreading propaganda in the United States of America?"

"I would ask the journalist who asked that question, in the presence of all, to give me the addresses of Soviet citizens who are spreading Soviet propaganda in the United States of America."

The hall rang with applause.

"I Liked the President's Methods"

On November 23 the Soviet diplomat completed his business in Washington. Roosevelt saw him off cordially and presented him with a portable radio set—a rarity in those days. He expressed the hope that they would meet again. But neither Roosevelt nor Litvinov could know then that in eight years the world would be at war.

When he arrived in the United States on November 7, Litvinov had not had an opportunity to see New York. His train had left immediately for Washington. Now, with Ivan Divilkovsky, Secretary General of the People's Commissariat of Foreign Affairs, he decided to make up for it and see the sights—the city's streets, bridges, monuments. Litvinov visited the 102-story Empire State Building, ascending to the observation platform for a view of the entire city and the harbor.

On the night of November 24 a big banquet was given in New York in Litvinov's honor. Everyone who was anyone in business and politics wanted an invitation to hear Litvinov's last speech on American soil. He spoke to the great audience as a representative of a new world, certain of its future.

Litvinov told about his talks with the President:

> Somehow neither of us was in a hurry to conclude. I think we both felt the approach of the moment when mutual obligations would be accepted and were trying to utilize the remaining period of freedom to conduct a little propaganda between ourselves. The President appealed to me with something like religious propaganda. Although we were hardly able to convert each other, I liked the President's method of discussing problems. I never doubted the results. From the moment the President characterized the absence of mutual relations as abnormal, I was sure that he would do all he could to eliminate the abnormality.
>
> The upheavals produced by the World War in the political, economic

LENIN AND LITVINOV: FIRST STEPS OF SOVIET DIPLOMACY

LENIN AND LITVINOV first met in Zurich in 1902. After that they met and talked many times, mainly abroad, as Litvinov, a professional revolutionary, was a marked man on Russian territory.

After their meeting in Geneva in the summer of 1913 they did not see each other again for five years, but they did correspond. Now they met again, no longer exiles. One was the head of the Soviet Government, the other an experienced Party worker.

Lenin fired question after question. When everything was cleared up, he informed Litvinov, as though the matter had already been decided upon:

"So, Maxim Maximovich, your sphere will be foreign affairs."

On the following day Litvinov was appointed a member of the collegium of the People's Commissariat of Foreign Affairs, and within a fortnight he left for Sweden on Lenin's personal assignment—to try to end the military intervention of the Entente countries and the United States in Soviet Russia. At that time the diplomatic representation of Soviet Russia in Stockholm, headed by Vatslav V. Vorovsky, was the only Soviet diplomatic bridgehead abroad.

On December 23, 1918, Litvinov addressed the Allied powers and the United States from Stockholm with the peace proposals of the Government of the Russian Federation. On the following day, on December 24, he sent a special letter to President Woodrow Wilson, who had just arrived in London.

Litvinov wrote to the President of the United States:

> The principles you proclaimed as the possible basis for solving European problems . . .* prompt me to send you these considerations as the majority of the points in your peace program have been included in a more extensive way in the leading program of the Russian workers and peasants, who are today the rulers of their country.
>
> It is incomprehensible to the workers and peasants of Russia how foreign countries . . . can consider it their right to interfere in Russian affairs today, when the working people themselves, after decades of struggle and sacrifice, succeeded in taking power and the fate of their country into their own hands, wanting nothing but their own happiness and international fraternity, which is not a threat to other nations.
>
> The workers and peasants have decided to protect their dearly won power and freedom against conquerors with everything the vast country places at their disposal; however, considering the inevitable senseless waste of life and values for both sides and wishing to avoid the added destruction Russia would be subjected to if there were further internal and external struggle, they, as this concerns the real interests of their country, are prepared to agree to all possible concessions if they thus succeed in ensuring conditions allowing them to develop their social ideas peacefully.
>
> The dictatorship of the working people and producers is not an end in itself but the means for creating a new social system under which all citizens, irrespective of former class affiliation, will be provided with useful work and equal rights. One can believe in this ideal or not, but this definitely does not in any way justify sending foreign troops to combat it or supplying arms and rendering support to classes interested in restoring the old system of the exploitation of man by man. . . .

The peace action initiated in Stockholm could have developed further, but the Swedish Government, under pressure from the Entente, decided to break off all relations with Soviet Russia and to expel the entire Soviet representation from the country.

In reply to Litvinov's message, William C. Bullitt, head of the political information department of the American delegation to the Paris Peace Conference, arrived in Moscow on a confidential mission in the early part of March 1919. His assignment was to find out on what conditions the Bolsheviks would agree to peace negotiations.

At first People's Commissar of Foreign Affairs Chicherin and Litvinov conducted the talks with Bullitt. Then on March 14 Lenin returned to Moscow from Petrograd. He received Bullitt on the same day. The American diplomat was presented with a draft peace agreement.

In it the Soviet Government expressed its consent to territorial demarcation between all the actual governments which had been formed in Russia, provided the armed intervention were stopped immediately, the foreign troops withdrawn and trade relations resumed.

Wilson realized that all the governments on the territory of Russia, with the exception of the Soviet Government, were supported by foreign troops, and that no sooner would the interventionists leave, than these governments would fall. Wilson turned down the Soviet proposals. The interventionist forces in Soviet Russia continued to assist the Russian counterrevolution until it was routed by the Red Army. Only then were these forces withdrawn.

* He was referring to Wilson's "Fourteen Points," the program statement he had made on January 8, 1918.

and social order of the capitalist world have not been outlived but continue to exert their deleterious influence.

Preparations for new wars are being made in the open. Not only has the enemy resumed and is accelerating the arms race, but what is probably even worse, the growing generation is being trained in a spirit of idealization of war.

Typical of such militarist education is the expounding of the quasi-scientific medieval theory that one nation is superior to others and has the right to rule over and even exterminate them. Songs, music, literature, science—all is made to serve the interests of militaristic training of the youth.[4]

The Soviet diplomat spoke of the failure of the disarmament conference, of the economic crisis and the millions of unemployed, of the continued dwindling of world trade, and rapped out to the silent hall: "All this gives us little hope of an improvement in the economic situation. Against this dismal background my land appears as a ray of light."

Litvinov told the audience of the industrial, technical and scientific progress the Soviet Union had made, of its public health system, its literacy rate, its cultural growth. It was probably the first time most of those New York business people had heard any of this.

About a talk at the banquet with one New York millionaire, Ivan Divilkovsky wrote his wife on November 29, 1933, from aboard the *Conte di Savoia* (the letter was mailed in Gibraltar—*Z.S.*):

At the banquet Friday night I sat at table next to the chairman of the board of directors of the world's largest bank, the Chase National Bank. The man was a 45-year-old one-hundred-per-cent American who has done business with our country for a long time but knows as much about our land as a high school walrus from Franz Joseph Land. He fired the weirdest questions at me. Finally he asked me how much I earned. I told him. How much is that in dollars? Two hundred. He (with a satisfied look): And I get 10,000. I wanted to tell him I wouldn't swap places but refrained. Next: Where do you live? What sort of apartment? Wife? Children? Servants? I answered all his questions. Took a keen interest in you, learned that you were the same age as his wife and that we have the same number of children. Began asking about you: What you did, what dresses you wore, would you wear expensive ones if you had them, and so on. I answered everything patiently (he kept begging my pardon for his questions but said that it all interested him frightfully). Having finally obtained all the information, he suddenly said: "I hope you won't be offended, but I would like very much to do something nice for your wife. One of the men on our board is the owner of New York's largest department stores. Allow me to introduce you to him tomorrow morning. You'll inspect his stores, select the best and most expensive clothes your wife would like, and Chase National will pay for it." All this talk took place in English. But here I turned to his other neighbor, member of the Amtorg Board Rosenstein, and asked him to translate that my wife would be extremely grateful if Mr. So-and-so, on her behalf, would donate money, of which he evidently has more than he needs, to some funds for aiding New York's unemployed. This was done, and the subject was never brought up again. Saying good-by, he muttered something about my "good joke." I'm afraid the unemployed will get nothing on your behalf. I believe that you will not regret the lost opportunity of getting all "the best and most expensive" in New York.

A Fat Turkey for Christmas

Litvinov left for Europe on board the Italian ship *Conte di Savoia.* In honor of the Soviet diplomat and his country, the liner hoisted a red flag.

From early morning a huge crowd had gathered. Litvinov made his way with difficulty to the gangplank and went on deck. Thousands of people waved good-by to him. "Long live Soviet Russia!" resounded on all sides. Also on deck were Postmaster General James A. Farley, who was sailing to Europe on the same ship, and diplomats from Washington who had come to see Litvinov off.

The *New York Sun* reported that in the general excitement over Litvinov's departure, Postmaster General Farley and the other dignitaries were edged out of public notice, forgotten by all except the policemen around them. The ship left the dock to loud cheers for Litvinov and his country.

While the negotiations were still in progress and especially afterward, the American press devoted whole columns to the event. The reports were conflicting. The isolationist press tried to scale down the success of Soviet diplomacy and reproached Roosevelt for letting Litvinov get the better of him. But there were also more sober appraisals. Though that prominent American journalist Walter Duranty proclaimed in the *New York Times* that the agreements were a "Yankee horse trade," he did point out that Litvinov was a "pretty shrewd trader himself." One should not forget, said Duranty, that the blood of Dutch traders and New England businessmen flows in the veins of Franklin Roosevelt, while Maxim Litvinov belongs to a race that has always been famous in the field of commerce. . . . "To sum up, I should say Litvinov is returning home with a pretty fat turkey for Christmas," concluded Duranty.

While Litvinov was sailing across the Atlantic, the radio and telegraph carried scores of reviews and commentaries on the Washington talks. The *détente* between America and Soviet Russia was covered by newspapers in Paris, London, Stockholm, Tokyo, Warsaw, Madrid and other capitals. Commentators differed in their appraisals, but they all conceded that it was an event of historic importance, not merely the signing of another diplomatic document. Even the press of nazi Germany was forced to admit the enormous success of Soviet diplomacy. That newspaper of big business, the *Frankfurter Zeitung,* wrote: "The Soviet Union has really broken through the last blockade that surrounded it." Of course, there was no foreseeing then that this document had laid the cornerstone of the future antinazi coalition.

Soon after the Washington negotiations, the French statesman Edouard Herriot, deploring the lack of consistency and the zigzagging and fruitlessness of French foreign policy, said that he wished his country had a Litvinov for Minister of Foreign Affairs.

The Last Fortress Falls

Litvinov returned to Moscow on December 9. Colleagues from the People's Commissariat of Foreign Affairs, foreign diplomats and journalists came to meet him at the Byelorussian Terminal. *Pravda* carried a drawing by the famous artist Deni on its front page. The artist had depicted a smiling Litvinov with a briefcase under his arm. It bore the inscription: "Peaceful policy of the USSR," and off at the side was a downcast militarist near his gun.

On the eve of the new year of 1934, the Central Executive Committee of Soviets opened its fourth session.

On the first day of the session Kalinin gave the floor to the People's Commissar of Foreign Affairs.

Litvinov was warmly greeted by the deputies. He made one of the most important speeches in his thirty years of diplomatic service. He gave an analysis of the world situation and explained why the United States had to recognize the Soviet Union.

This republic alone among the major powers stubbornly refused not only to recognize the Soviet Union formally, but even to acknowledge its very existence. Thus, it did not wish to formally accept the fact of the October Revolution, continuing to recognize the Provisional Government of Kerensky, which existed for it somewhere out of time and space, and it has maintained official relations with its agents up to just recently. It was recalcitrant not because its differences with us were greater than those of other countries or because it had suffered more from revolutionary laws than did others. No, in essence it was continuing the war declared by the whole capitalist world after the October Revolution against the new Soviet state system whose aim was to build a socialist society. This was a struggle against the peaceful coexistence of two systems. Seeing its associates in this struggle, the other capitalist countries, quitting the field of battle one by one, America said to them, as it were: I understand your point of view, you are weak and in difficulties; you are making great sacrifices and therefore must quit the fight. But I am sufficiently strong to carry on for all of you. For fifteen years it staunchly maintained its position, but now it has finally had to give up the struggle. That is why, comrades, in my exchange of letters with President Roosevelt of November 16, one must see not simply the recognition of us by yet another great power, but the collapse of the last bastion, the last fortress in the offensive against us by the capitalist world, which after the October Revolution took the form of nonrecognition and boycott.[5]

Litvinov was no great orator. Had he lived in ancient Rome, he would have attracted no more than a handful of listeners to the square before the Forum. He did not capture audiences by the timbre or modulation of his voice, but by invincible logic, by the force of internal conviction which he conveyed to his listeners.

Litvinov held the floor for a long time. He spoke of the processes developing in bourgeois society and drew a conclusion that was reiterated for many years by diplomats, scientists and propagandists. He said that a war was brewing, that it was being instigated by nazi Germany and imperial Japan, that it would first be directed against the Soviet state, and for this the army and all the people had to be prepared.

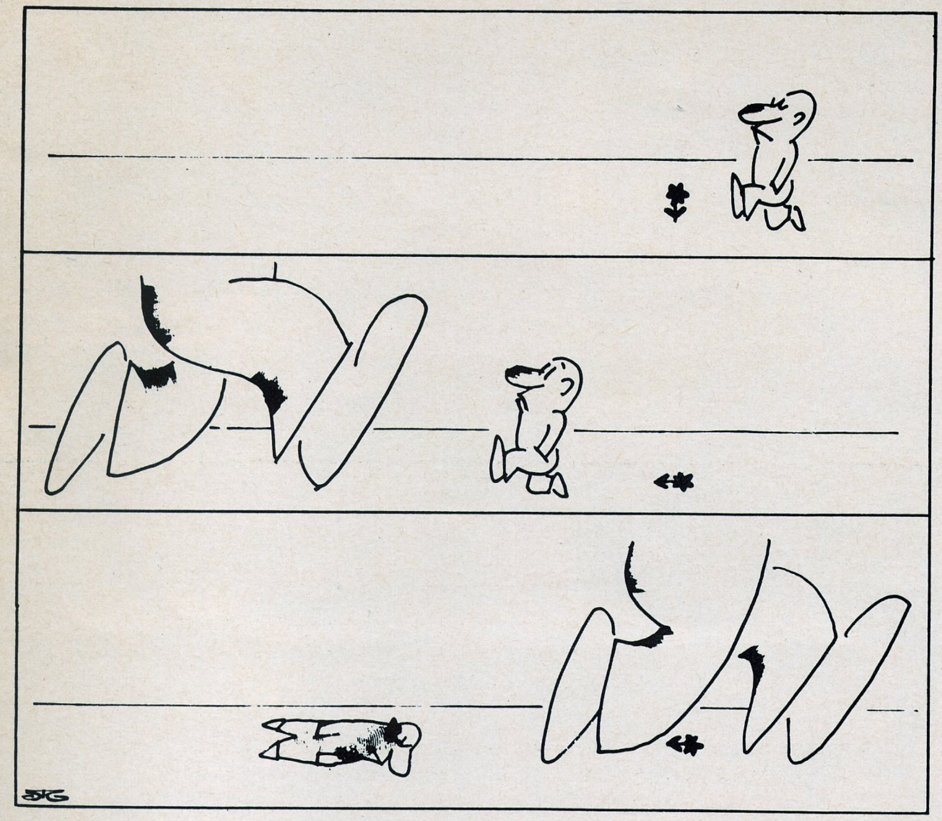
As Litvinov gathered up his papers and stepped down, the deputies gave him a standing ovation.

This was on December 29, 1933, in the seventeenth year of Soviet power.

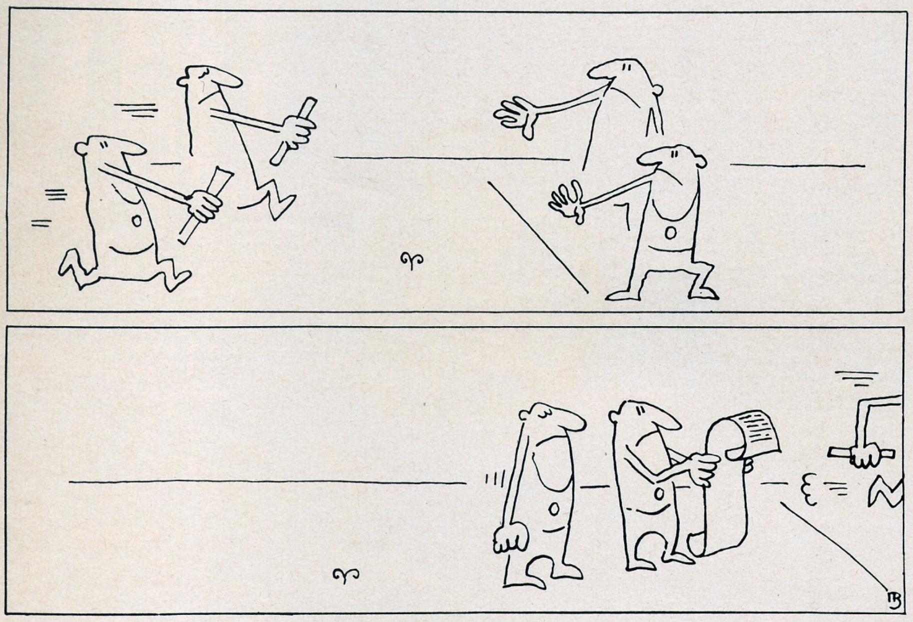
(To be continued)

[4] M. M. Litvinov, *USSR Foreign Policy,* Speeches and Statements (Moscow 1935), pp. 61-63.

[5] **Ibid.,** pp. 262-263.

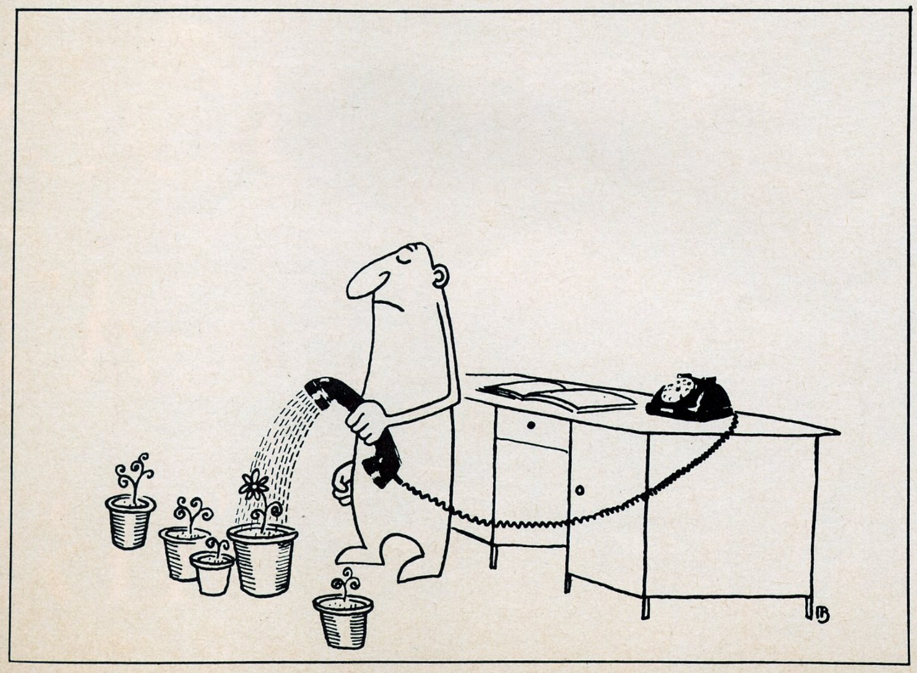


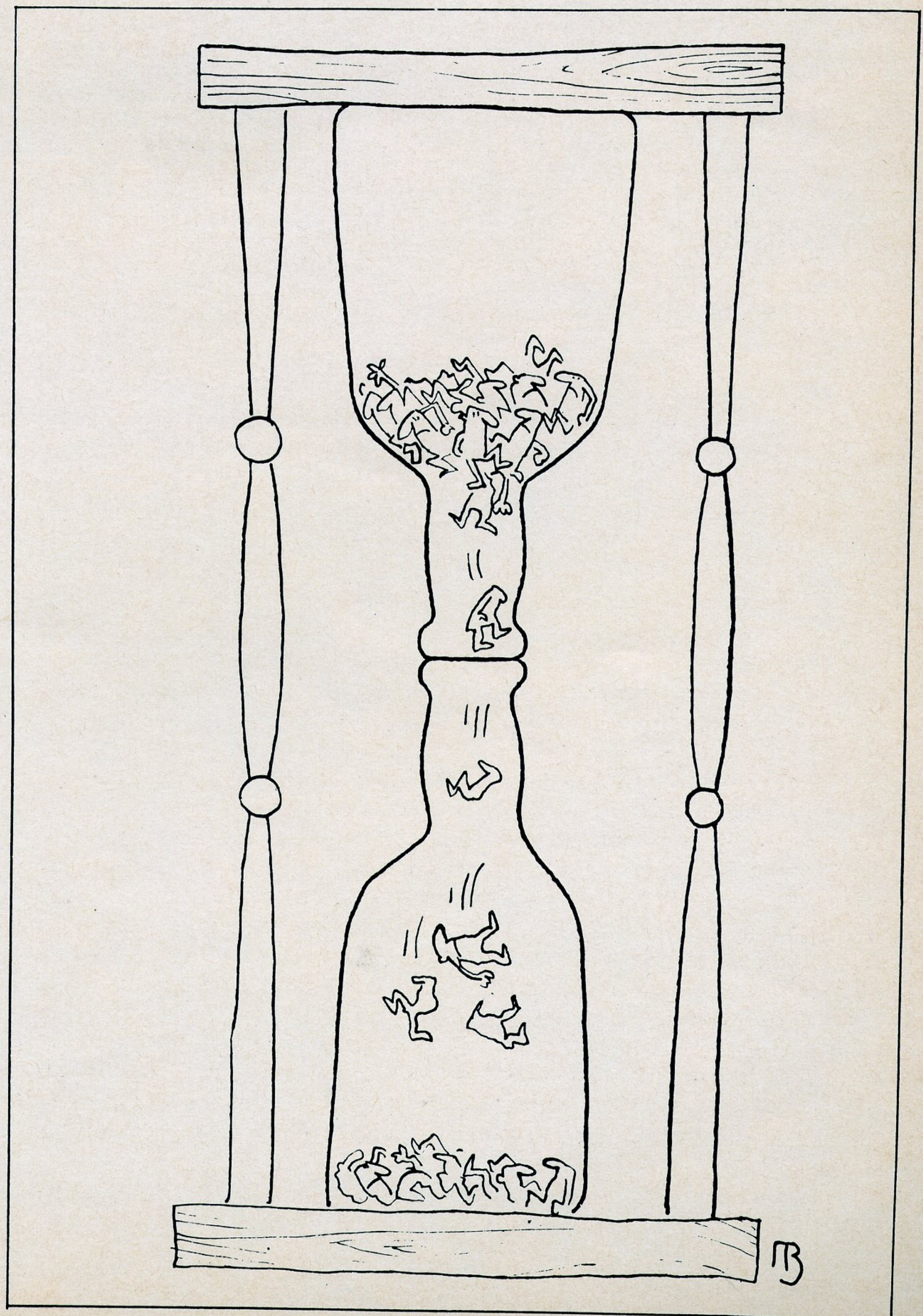


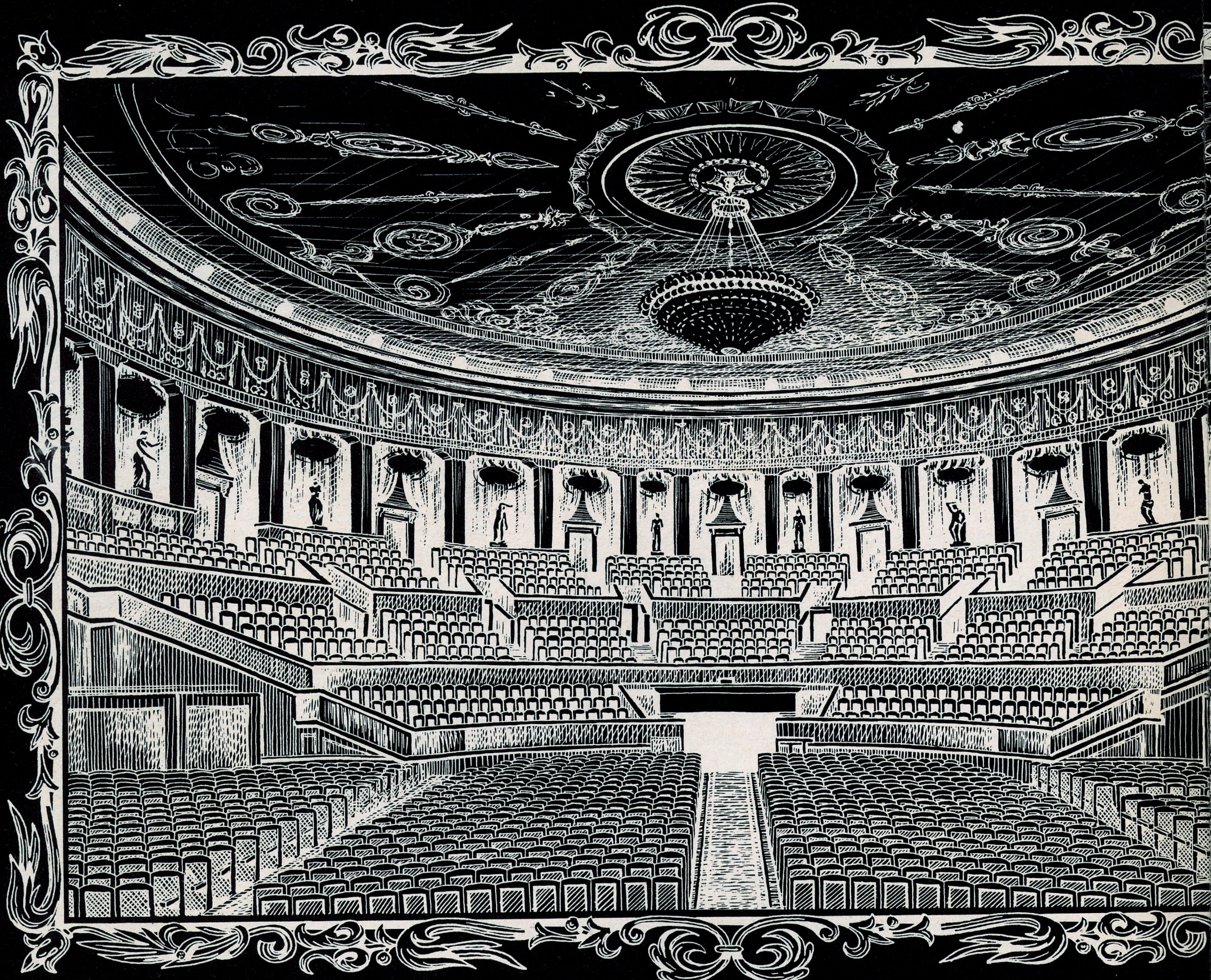


HUMOR

Drawings by Vitali Peskov and Oleg Tesler







THE BOLS
THEAT
BUT IN SIBE

By Natalya Lagina
Art Critic



HOI ER, RIA

PARIS CRITICS went out of their way to applaud young ballerina Tanya Vasilyeva for her performance of the variations from Sergei Prokofiev's ballet *Cinderella*. She was awarded a prize named in honor of a famous predecessor, Anna Pavlova. When French reporters asked Tanya which ballet company she was with—the Moscow or the Leningrad—her answer surprised many of them: "The company in Novosibirsk, though I was born and graduated from a ballet school in Leningrad."

"Novosibirsk? But that's somewhere back of the beyond. Why did you go there?"

"I wouldn't call it back of the beyond," answered Tanya with a smile. "Anyway, Novosibirsk has a remarkable theater. Many actors and dancers would be happy to join the company. I'm glad I did."

Shortly thereafter Parisian balletomanes saw for themselves that "remarkable" was no exaggeration. The ballet company's spring 1967 tour of France and a score of other countries was a resounding success.

The opera company of this theater, the youngest of its kind in the Soviet Union, is no less remarkable. Some of its soloists are world famous, and the company has earned itself the appellation "Siberia's Bolshoi."

The theater is twenty-three years old. Its opening performance was on May 12, 1945. Four days earlier, on May 8, the dress rehearsal of Glinka's opera *Ivan Susanin* had been interrupted by the news of the German surrender and the end of the war. In other words, the Novosibirsk opera was born on V-Day. When its company was formed, the city had neither a conservatory nor a ballet school of its own. However, the invitation to cooperate was accepted by many singers and dancers who had studied in Moscow, Leningrad and Kiev. As for the *corps de ballet* and chorus, they were recruited directly from local amateur groups.

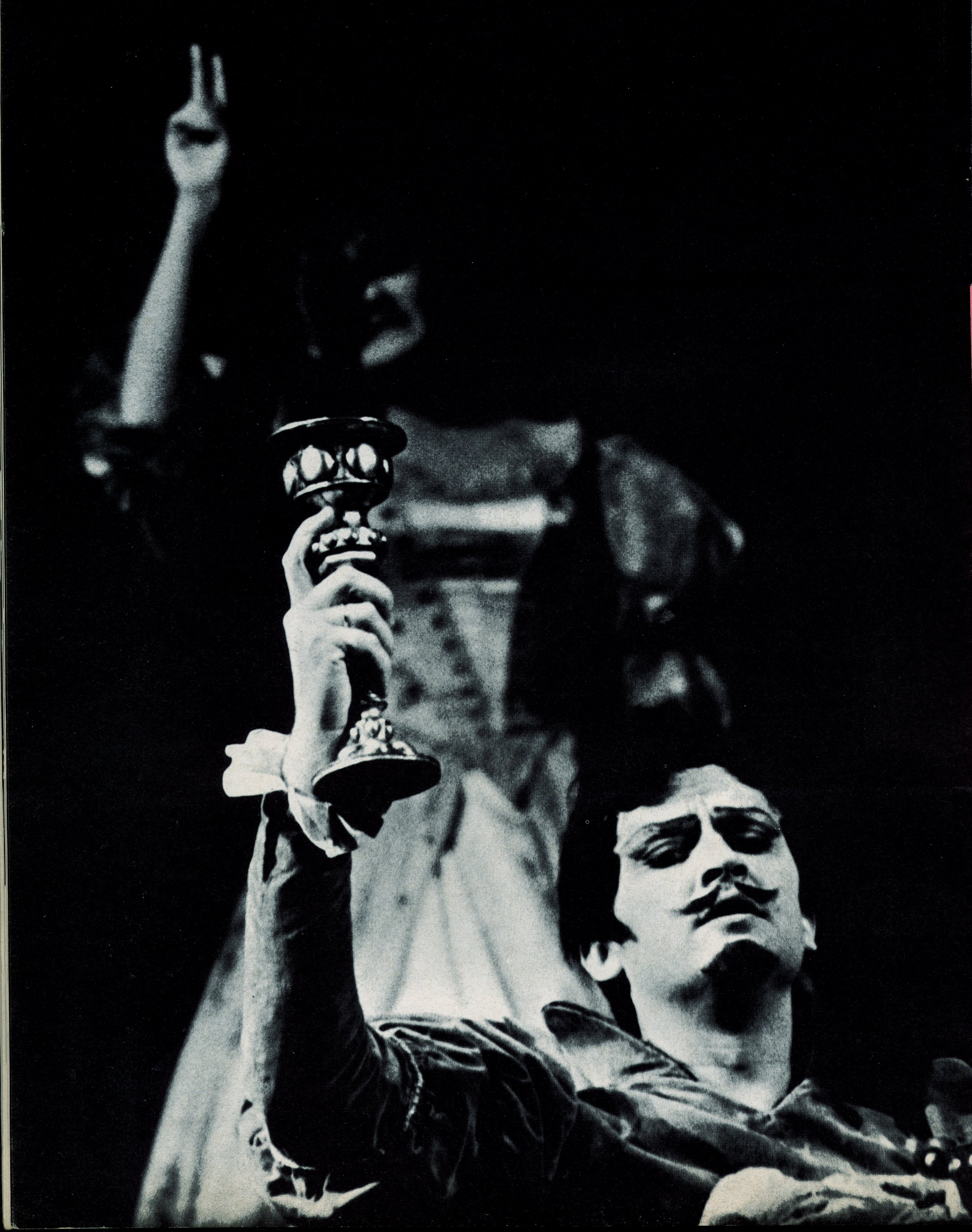
"Create, Invent and Try"

What accounts for the quality of the theater? Several things. The key factor is probably experimentation. "Create, invent and try!" this line from Vladimir Mayakovsky's poetry has been the credo of the Siberian company since its inception. It has tried a wide variety of styles and approaches.

Many now famous theater people were trained at the Novosibirsk theater: Roman Tikhomirov, chief stage director of the Kirov Opera Theater, Leningrad; Lev Mikhailov, People's Actor of the USSR and chief stage director of the Stanislavsky and Nemirovich-Danchenko Musical Theater in Moscow; Alexei Krivchenya, a Bolshoi Theater singer; and Gennadi Ledyakh of the Bolshoi Ballet, to mention a few. Yuri Grigorovich, chief choreographer of the Bolshoi Ballet, began his career in Novosibirsk. He staged Sergei Prokofiev's *Stone Flower* and Arif Melikov's *Legend of Love*. Tchaikovsky's *Sleeping Beauty,* now being performed at Novosibirsk, was staged by Konstantin Sergeyev, chief choreographer of the Leningrad Ballet. The designers are Konstantin Yuon and Suliko Virsaladze, whose fame is nationwide.

More opportunities for young people is one of the company's principles. Oleg Vinogradov joined as a dancer when he graduated from the Leningrad Ballet School. Before long he was starring in nearly every production. Then the managers noticed Oleg's penchant for independent choreography, and he was entrusted with the staging of the pastoral in *The Queen of Spades* and the dances in Edward Lazarev's satirical opera *The Bedbug*. The experiment was a success. Vinogradov also distinguished himself as a stage designer for *The Princess of the Circus* and *The Circus Is Ablaze With Lights*. Vinogradov's choreography matures with every new ballet. Today his choreographic style in Prokofiev's *Cinderella* and *Romeo and Juliet,* which he staged in Novosibirsk,

Andrei Fedoseyev rose to fame almost overnight. He is considered one of the country's best in the title role of Mozart's opera Don Giovanni.



and Vladimir Vlasov's *Asel,* which he staged at the Bolshoi Theater, is acclaimed as most original and striking.

Oleg Vinogradov's debut in *Cinderella* coincided with his twenty-fifth birthday. Now he is thirty and considered one of the most promising Soviet choreographers. True, this last season he worked in Leningrad, not in Novosibirsk, but this is apparently the lot of the Novosibirsk theater. As soon as someone makes a reputation, Moscow or Leningrad come calling.

"How do you feel about developing young talent which is enticed away by the theaters of Moscow and Leningrad?" I asked Emil Pasynkov, chief stage director of the Novosibirsk company.

"We take it in stride," he said. "We are even flattered that the country's best theaters steal our people. Besides, they don't break off their creative association when they leave. They take part in our gala performances and direct some of our plays, ballets and operas. There is a continual flow of young talent, and others quickly replace them."

The Young People Set the Tune

Soprano Zinaida Didenko is an example. She joined the company when she graduated from the conservatory in Gorky and sang eight leading roles in one season. Andrei Fedoseyev, a graduate of the Moscow Conservatory, also became a leading soloist almost overnight. Today he is one of the country's most sought after performers for the role of Andrei Bolkonsky (in Prokofiev's *War and Peace* and Don Giovanni in Mozart's opera, and he is also a subtle interpreter of several modern operatic parts.

Most of the young singers are graduates of the Novosibirsk Conservatory. Those especially gifted are on stage long before graduation. Valeri Yegudin, a dramatic tenor, sang a very challenging role in *The Bedbug* when he was a student, and his graduation role was Gherman in *The Queen of Spades.*

That is the most natural way of joining Novosibirsk's ballet and opera companies. But there are other ways too. Sometimes the country is scoured for someone to fill a leading role, though understudies are always there just in case. A happy find of this kind was Lesya Shevchenko, a student at the Odessa Conservatory. In her fifth year at the conservatory she was cast in the new staging of an opera and, after a successful debut, went back to Odessa to earn her degree. She returned to Novosibirsk a full-fledged opera singer.

The theater also signs contracts with artists from other companies. Two such recent newcomers are the well-known Bulgarian singer Ivan Dimov who sang in *Aida* and *Othello,* and Nina Timofeyeva, a ballet dancer from the Bolshoi Theater, who danced in *Romeo and Juliet.*

"We want to push out beyond our own limits," the chief director says. "However, when we invite performers from other companies, we do not think of them as outsiders but as part of our group. Even when we invite stars, we try to infect them with our own Siberian creative virus."

"Do you succeed?"

"I think we do. And that does not only apply to performers. We also involve composers. Antonio Spadavekkia made another version of his opera *The Gadfly* and Tikhon Khrennikov a second version of his opera *A Plebian Son-in-Law* especially for us. Dmitri Shostakovich came to Novosibirsk to help us stage a *Boris Godunov* he had edited and orchestrated. Now we are working on the opera *Khovanshchina,* also orchestrated by Shostakovich, with the composer participating directly in the staging.

This theater does not go in for resplendent stage designs; it prefers understated graphics whenever possible. The dramaturgy of color is as full of impli-



Raisa Antonova and Andrei Levitsky give original interpretations of the Don Giovanni *characters Zerlina and Leporello.*



cations here as in Michelangelo Antonioni's films. The staging of *Othello, Don Giovanni* and *Boris Godunov* is especially interesting in this respect. On the other hand Khrennikov's musical *A Plebian Son-in-Law* is as full of riotous color as a Shrovetide crowd. Next to it the design of *The Sleeping Beauty,* which was staged so successfully a while back, is austerely elegant.

The composers working for the Novosibirsk Theater are as young as its performers. Edward Lazarev was 27 on the opening night of his opera *The Bedbug.* It is based on Mayakovsky's play. The authors of the first lyrical opera, *Alka's Song,* copyrighted by the Novosibirsk Theater, Georgi Ivanov (music) and Anatoli Ivanov (lyrics), are also young.

Yes, young people do set the tune here. On tours all through Siberia and the Far East, the company gets an especially warm welcome from the young people now transforming these parts of the country. In Komsomolsk-on-Amur the company was cited Honorary Builder of the city.

This is a mobile theater in the very best sense of the word. Like omnipresent Figaro, it is constantly on the go. It plays to audiences in the remote North, in the port of Nakhodka, on the construction site of the Bratsk Hydroelectric Station on the Angara, in the country's capital. It has toured Vienna, Tokyo, Cairo and the cities of Australia. Its repertoire is broad, with an especially large representation of Russian and world classics. In the 23 years of its existence it has had one hundred first nights.

"So far everything is rosy. But aren't there any thorns?" I asked the chief stage director.

Siberians Are a Stubborn Lot

"Of course there are thorns. As a matter of fact there are more difficulties than easy successes," he answered. "But I should say that these difficulties are typical of any theater of this kind in our country. Our composers produce too few operas and ballets, I mean really good ones. We turn down anything second rate. Our search is sometimes agonizing. To tell the truth, we have had to resort to theater versions of oratorios because of lack of operatic material. We intend to stage a trilogy of Georgi Sviridov's oratorios based on the poetry of Vladimir Mayakovsky, Sergei Yesenin and Alexander Blok. We hope that Sviridov will write an opera for us. For the time being, however, we have no opera, just a hope.

"And here is another problem while we are on the subject. Our stage is very large, larger than the stage of Moscow's Bolshoi Theater. It's fine for large-scale performances but embarrassingly big for such chamber works as *Don Giovanni.* It taxes all the ingenuity we have to stage chamber operas. To get the acoustical effects we want, we have to bring the stage closer to the audience, almost into the orchestra pit. However, all these problems are not as formidable as they sound. We are Siberians, and Siberians, as you know, are a stubborn lot."

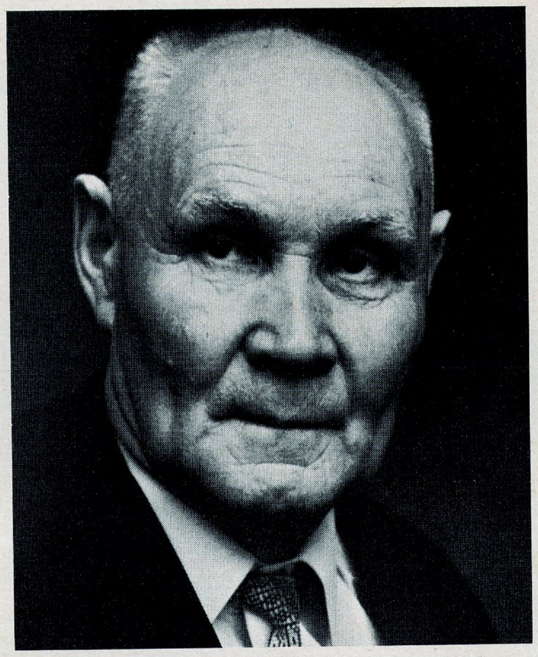
Emil Pasynkov, Merited Artist of the Russian Federation, was born in Leningrad, graduated from the conservatory and worked at the Kirov Opera Theater in Leningrad, where he staged Shostakovich's opera *Katerina Izmailova.* He had a promising career in his native city, and when he was invited to Novosibirsk, he accepted without a second thought. He was thirty years old; the theater was only fourteen. Eight years later, in 1963, the company had won the title Academic Theater, and Emil Pasynkov had established an enviable reputation for his direction.

He will never leave the Novosibirsk Theater. Though he comes from Leningrad, he calls himself a Siberian. And so do all his colleagues. They are honest-to-goodness Siberians, whether they were born here or drawn here by the romance of a new frontier.





The country's youngest opera theater, located in Siberia of all places, stages The Three Musketeers *in really gasconade tempo.*



Mikhail Volsky was cited by the USSR Academy of Sciences for determining that animals and higher plants assimilate atmospheric nitrogen.

INERT OR LIFE-GIVING?

BY ELEONORA GORBUNOVA

Science Commentator of Novosti Press Agency

Last September 10, the Inventions and Discoveries Committee of the USSR Council of Ministers cited the work of Mikhail Volsky, Doctor of Technical Sciences, as a discovery. "A previously unknown ability of animals and higher plants to assimilate atmospheric nitrogen required for their normal vital activity has been established."

The discovery has been entered in the USSR State Register as No. 62, with priority from December 19, 1951.

IT WOULD BE NATURAL for this tall brisk man with gray hair to bear a grudge against everyone. Twenty years ago he submitted the results of his studies to the judgment of scientists. They conflicted with long accepted explanations of the principles of life. He had made a remarkable and wonderful discovery which suffered an unfortunate fate.

"Why do you call it unfortunate?" Volsky asked me. "The path of new ideas has been thorny in all ages and among all people. If you mean the endless arguments with scientists who disagree with my findings, I consider that quite natural. If you mean the difficulties that could break a man's will, I am accustomed to them. I have been studying the strength of materials for forty years, and I believe that a good metal, a "healthy" metal, has no fatigue. At least it shouldn't have."

Steam Boilers to Biology

Professor Mikhail Volsky is head of the Strength of Materials Department at the Gorky Institute of Water Transport. I could speak at length about his many technical achievements—the new locomotive boilers he designed or his boilers for ships. But the discovery that attracted attention has nothing to do with technology. It was a new concept of respiration.

"What was the reason for this unusual shift from thermal stresses in steam boilers to biology?"

"It was pure chance," says the professor, smiling to himself as he recollected wartime Moscow in 1942 and a woman-doctor, a stranger, who had asked him to help her calculate the perimeter of an elliptical trachea for her master's thesis on the physiology of respiration.

"I was surprised to learn that the doctor did not need any other calculations. What about the cross-sectional area of the trachea, the rate of air flow through the respiratory duct, the loss of air pressure and so on? It seemed odd to me that these figures did not interest her. In my opinion they were closely related to the mechanism of respiration.

"I sat down to study. I tried to grasp the underlying basis of the physiology of respiration by translating the biological meaning of existing postulates into mathematical formulas. However, the rigorous formulas were at variance with the conclusions of physiologists.

"I wanted to know whether the error lay with the traditional theory or with my calculations. Well, that was the starting point of my intrusion into the foreign field of medicine."

Volsky had never held a scalpel in his hands. The Strength of Materials Department did not and could not keep animals for experiments or equipment for studying lung activity. But his desire to verify the vague assumptions suggested by his calculations was so great that he set up his own laboratory at his own expense.

The new work required much more than self-sacrifice. Intrusion into physiology, a science with a history of several thousand years, a science where everything had long been clear, habitual, a priori, was sure to bring more grief than success. I believe that this is why today Volsky is so calm and judicious as he shows me dozens of letters and reviews, hundreds of pieces of paper which directly or indirectly advise him to mind his own business and leave physiology alone. However, the "business" was started and produced results that were quite unexpected.

Inhalation and exhalation that follow one another are as natural as life, they bring life. Why do we breathe? What drives the fantastic tangle of alveoli and bronchioles to either dilate or turn into amorphous cells? This would seem to be a simple and a well-known process. Physiologists believed that it was the result of changes in the capacity of the thorax and that in the narrow space between the thorax and the lungs there was a vacuum with a small quantity of liquid.

Volsky's experiments show a different picture. According to the laws of physics, a vacuum in the pleural cavity is impossible. The pleural cavity has to contain air which, on its way there through numerous obstacles, loses its pressure and becomes rarefied.

The lungs are surrounded with air. The changes in pressure with inhalation and exhalation are a necessary element in the process of respiration. This is the main but not the only conclusion drawn by Volsky. He verified this conclusion by experiments which, though very simple, nevertheless continue to provoke argument. It is hard to judge which side is right because there are dozens of pros and cons. Then there is the danger of falling under the influence of impressive opinions. Time is a good arbiter in such circumstances. Of course it would be better if this question were decided as soon as possible because the outcome of this academic argument has important implications for practical medicine. Understanding

the physiology of respiration is the basis for understanding pathological processes and new methods of treatment.

Air as a Nutrient

There were quite a few occasions in the history of medicine when unbidden "strangers" introduced revolutionary ideas. Remember that Ilya Mechnikov had been a zoologist, and Ivan Sechenov a military engineer, to mention only two. Today chemists, mathematicians and physicists render modern biology a great service by introducing the methods and views of their sciences. These specialists are not weighed down by the burden of tradition and therefore have a right to be "ignorant," to doubt the concepts which in biologists' minds have long become synonyms for truth.

Atmospheric nitrogen is an inert, lifeless gas. This is what our teachers and the teachers of our teachers used to say. It was considered an indisputable fact!

Nitrogen is a vital link in the structure of protein molecules and hence in the chain of life. Its sources could have been called sparse if the air around us did not contain twenty-three tons of nitrogen per square mile of the earth's surface. But atmospheric nitrogen is a fiction. It can only be used as raw material for complex modern installations producing compounds the organisms of human beings, animals and plants can accept.

Is it possible that during their agelong evolution living beings did not learn to use atmospheric nitrogen, this vital gas that is inhaled in such abundance with the air?

Volsky considered this problem a natural extension of his study of human respiration. In this case as well his investigations were stimulated by the disparity between numerical data and postulates.

For instance, an embryonated egg is able to build up protein without any external supply of food. Another example which is quite as simple: a man's body weighing about one hundred and seventy-five pounds contains thirty-five pounds of protein or five and a half pounds of nitrogen. The man's daily food ration contains no more than one-fifth to one-half ounce of nitrogen. This quantity is far too small for the continuous process of protein synthesis and for renewing cellular protoplasm. If this is true, what compensates for this nitrogen deficiency? Can it be atmospheric nitrogen? However, this assumption is almost heretical, a violation of the 150-year-old principles prevailing from the days of Lavoisier. Nevertheless, Volsky started conducting "strange" experiments in his laboratory.

Identical groups of eggs were placed in two exsiccators. One group was surrounded by normal atmospheric air. In the other exsiccator the atmospheric nitrogen was replaced by argon. Four days later and at the proper time normal chickens were hatched in the first exsiccator; the development of the chickens in the other was obviously delayed.

"Could this be explained by the injurious properties of argon and not by the fact that the embryo requires nitrogen for normal development?" I asked the professor.

"No," he answered. "A similar result was obtained when nitrogen was replaced by helium, which like argon does not enter into reactions injurious to living tissues under normal conditions.

"We have performed hundreds of experiments with animals and plants, making some of them live in an atmosphere devoid of nitrogen while others lived under normal conditions. The results were invariably the same: The absence of nitrogen impaired development. At the same time their consumption of nutrients increased sharply as if their instinct told them to compensate for the absence of atmospheric nitrogen by absorbing the nitrogen contained in food."

"Then these experiments cannot be considered absolute proof of the fact that atmospheric nitrogen is used for building up protein?"

"Our hypothesis was confirmed by experiments with labeled nitrogen, or to be more exact, by the use of an isotope of nitrogen with which we filled an airtight chamber. On analyzing the proteins contained in embryonated eggs developing in these conditions, we invariably found labeled nitrogen in them."

"If atmospheric nitrogen is really a vital gas and not simply dissolved in the body tissues, there must be ways by which it enters chemical compounds for building protein molecules."

"I believe that there may be several ways of assimilating nitrogen, the main and most important being its acquisition by erythrocytes, *i.e.* red blood corpuscles, containing fumaric, asparaginic and other acids. This process is augmented by the effect of atmospheric ions on the human, animal and vegetable organisms in that they increase the content of hemoglobin, the erythrocyte and the leukocyte counts and improve metabolism.

"Nitrogen may be fixed in the form of ammonia and other compounds due to the presence of such microelements as cobalt, lithium, iron, copper, molybdenum, boron or titanium. It is probable that bacteria in the lungs and the gastrointestinal tract play an important role in this process.

"By the way, isn't it paradoxical that the assumption that some bacteria assimilate inert nitrogen is no longer strange? Why shouldn't we make a further assumption that their relatives inhabiting a live body are capable of the same thing?"

Naturally, the solution of this problem requires further investigation in microbiology, biochemistry, physiology and other fields of biology. The group of scientists headed by Professor Volsky (incidentally, now this group has been formed into a laboratory at Gorky University) is too small for so multifaceted and complex a job. But the indomitable Volsky is making vast plans for experiments to verify the theory that has taken twenty years of his life.

Today there are many more adherents to the theory and more facts proving it right.

Is nitrogen inert or life-giving? The anwser to this question affects the answer to many questions: in general biology, for example, the great problem of the origin of life; and in everyday practice, the problem of plant nutrition and ways of increasing plant productivity. Then there is the eternal problem of the effect of environment on the body, and lastly the problem of creating a conditioned climate on board a spaceship.

VSEVOLOD STOLETOV: FROM HYPOTHESIS TO DISCOVERY

MINISTER OF HIGHER AND SPECIALIZED SECONDARY EDUCATION OF THE RUSSIAN FEDERATION COMMENTS ON THE DISCOVERY MADE BY MIKHAIL VOLSKY

NITROGEN as a chemical element has stirred the minds of naturalists for two centuries, and not without reason. Free nitrogen is chemically inert, while in combinations with other elements it is unusually active. The volume of fixed nitrogen in the earth's crust is negligible; the volume in biological matter is large. Since the end of the eighteenth century nitrogen has been considered unnecessary for life although nucleic acids and proteins, which are essential to life, must contain fixed nitrogen.

As far back as 1946 Mikhail Volsky expressed his doubts that nature had "delegated" to nitrogen, which constitutes 78 volumetric per cent of the earth's atmosphere, the passive and humble role of an oxygen diluent. He began to study the role of nitrogen in the respiration of animals and higher plants. In his search for an answer he decided to determine the content of nitrogen in an embryonated egg at various stages of its development.

The results of this experiment and, moreover, their explanation were most unexpected, and at first the majority of scientists were not ready to accept his assumption. However, further experiments with the incubation of chickens, the pupae of bees, corn and other objects invariably proved this bold assumption. That is the background for this remarkable discovery.

Question: What directions should further studies based on Professor Volsky's discovery take?

Answer: The study of the biological mechanism of assimilation of molecular atmospheric nitrogen by live organisms is most important. Professor Volsky has formulated several hypotheses. They are based on a variety of scientific data concerning the properties of blood and chlorophyll, the effects of atmospheric ions on plants and animals, the role of microelements in life and the role of the microscopic "inhabitants" of plants and animals, *i.e.* microbes and viruses. Every hypothesis requires thorough experimental investigation, and further development will be based on these investigations. These, in my opinion, are the directions for future research.

Question: What plans are there for improving Volsky's laboratory?

Answer: For twenty years Professor Volsky, a true scientist, has energetically and devotedly searched for a solution to a problem that interests him. He is a doctor of technical sciences, but for a deeper understanding of the chemicobiological problem he was solving, in 1964 he wrote a thesis for a doctor's degree in biology.

His self-sacrificing work has not been unnoticed and has received strong support. Professor Volsky now has a good laboratory with first-rate equipment.

The ministry proposes to equip the laboratory with additional advanced equipment and enlarge its staff. The conditions for training more personnel will also be improved. The ministry will also provide for the publication of the studies done in the laboratory.



Ex-Arctic mariners and mechanics (left to right) Ilya Medvedovsky, Arvid Karklin, Sergei Perminov and Dmitri Chukhchin talking over old times.

SEA DOGS RETIRED

By Marina Khachaturova
Photographs by Yevgeni Svet



Polar seamen seem to have chosen Kherson, a town in the warm South, to retire in. This is Arctic Street, where many of them own their own home.



Captain Dmitri Chukhchin's major occupation now is gardening, interrupted on frequent occasions by granddaughter Irina and puppy Sharik.



It's not easy becoming a landlubber if you've sailed the seas as many years as Captain Andrei Burichenko has. He was 72 on his last birthday.

WHY A STREET NAMED ARCTIC in Kherson, in a Southern city? Newcomers wonder, but the name is not out of place. The residents of Arctic Street all used to work in the North. They were captains, navigators, mechanics, or held jobs in the ports, the offices of steamship lines, shipyards. They are people who sailed the northern seas and had permanent homes north of the Arctic Circle, where winter is long and summer so short that dwellers in the middle latitudes would argue seriously whether there was any summer at all.

Some of the retired Arctic and Antarctic seamen have been moving to Kherson for eight years now. The first Northern pensioners to come in 1960 were given plots of land on the city's outskirts, a stretch of wasteland they have transfigured into a flourishing green island. Kherson itself is situated on the Dnieper, where it flows into the Black Sea, and has a population of some 200,000. The port was founded by Prince Grigori Potemkin, favorite of Catherine II, in 1778. Since then it has grown in size and importance, adding factories and mills as well as dwellings. But Kherson's chief attraction is still its setting on the broad, smooth Dnieper, the third largest river in Europe after the Volga and the Danube.

As I approached Arctic Street in a taxi I was struck by the greenery. There are two-story houses on the street, surrounded by vineyards, fruit trees and vegetable and flower gardens. The houses are brick. Each of them was built from the savings of the pensioners plus a loan from the state of 700 rubles, amortized over a 10 year period. The state also paid out 30,000 rubles to build roads, bring in electricity and lay sewage pipes and water mains.

These are two-family houses, divided vertically, each having a dining room, kitchen, bathrooms and sunporch downstairs, and three rooms and a sunporch upstairs. The furnishing is done by the owner. Some of the pensioners prefer antiques, others incline to the very modern. Although Arctic Street is all pensioners, I saw no really old people there. Old is the last word you would apply to the energetic, cheerful senior citizens in this community. A record of 15 years of work in the North entitles you to retire five years earlier than other people: men at 55 and women at 50.

The Art of Staying Young

Old age is something no one looks forward to. It is hardly the best time of life, even with financial security. It is not surprising that a whole field of medicine is working on the miseries aging brings. If, some 100 to 200 years from now, the diseases which accompany old age can be alleviated, many good things will remain: vitality, experience, knowledge and wisdom.

History has many examples, going back to ancient times, of fruitful work done in old age—not only by creative people such as writers or artists, but by all sorts of individuals doing the work they love.

Many people look forward with misgivings to retirement and a life of enforced, although earned, idleness. Before the residents of Arctic Street retired, they spent their vacations in Kherson. They liked what they saw. Growing old no longer seemed so uninviting.

It was not the thought of their own homes, built on plots of land the state would give them, that brought Northerners to Kherson. It was the knowledge that they would have work to do, work within their limitations, when they grew old. Although it would be different from the kind of work they had been doing, it would be purposeful, constructive toil. Children, they say, have to be reared as carefully as a gardener cultivates a tree. Turn that saying around and it fits the people on Arctic Street. They have all raised children; now they are growing grapes, cherries, plums, peaches, apricots, tomatoes and, of course, roses in their gardens. They mastered the art of navigating ships; now they are mastering the art of growing things, learning from books and the example of others. They have said farewell to the icebreakers and returned to the land, to the ancient calling of agriculture.

From the White Sea to the Black

In 1954 the Arctic steamship line was shifted from Arkhangelsk, on the White Sea, to Murmansk, a port on the Barents Sea that is ice free the year round. Some of the seamen moved to Murmansk with their families. Not many of the residents of Arctic Street are native Northerners. Only Captain Dmitri Chukhchin and Nikolai Toropov, who used to be a chief controller, were born in Arkhangelsk Region. The rest come from all over the country. Some have returned south after many years of work in the North. Georgi Azadov is an Armenian from Odessa, for example. Ilya Medvedovsky is a Jew who was born and raised in Kherson, and Anatoli Durov is a Russian from the Donets coal fields. Arvid Karklin was born in Ventspils on the western coast of Latvia, Valentin Domogatsky comes from Vladivostok, the Soviet Far East and Sergei Perminov from Kronstadt, near Leningrad. Despite this geographical diversity, however, long years of work in the North have made them all true Northerners.

The climate of a country always stamps the people who live there, giving them traits and characteristics peculiar to the region. The North shows up a man for what he is worth very quickly. It does a sort of "natural selection" to reveal traits that would be easily tolerable under less rigorous conditions, but are completely unacceptable in the North. The high standards Northerners set themselves have not made them rigid and intolerant. On the contrary, they are kindly, responsive people, always ready to help others, people who set a high value on friendship and cooperation.

True to their principle of thinking of others they planted fruit trees as well as acacias and chestnuts along their street, and let the passerby help himself. On their own plots of land they raise fruit and vegetables, not for the purpose of selling, but because they like the outdoor exercise. All of them have their pensions and savings. Many families have their own cars. Because of the hard working and living conditions in the North everyone who works there, from an ordinary seaman to a captain, is entitled to the maximum pension of 120 rubles a month. The pension is not based on their earnings, for a captain makes 600 rubles a month and a seaman 250.

Although these Northerners have made the South their home, they have not lost touch with the Arctic. They all subscribe to the *Arkticheskaya Zvezda* (Arctic Star), a newspaper published in Murmansk, and correspond with old colleagues, who sometimes come to Kherson for a visit. They are interested in everything that goes on in the Northern merchant fleet: who was appointed to what position, who was made captain of what ship, who has retired or moved away. And they write books—not novels, but books about navigating through the ice floes that they hope will be useful to their successors. One such book, *Sailing the Antarctic*, by the late Alexander Dubinin, captain of the *Ob*, summarizes the experience of Antarctic expeditions. And although it is an account of mooring ships to ice floes, loading and unloading operations and other such things, it is also a story of a full life. The residents of Arctic Street have all led such lives.

They range in age from 55 to 65 years. All of them have traveled widely and seen a great deal. All fought in the last war. Ilya Medvedovsky, a mechanic who retired two years ago, still carries a shell splinter in his chest. Of all the people on Arctic Street he seemed to me the least like a Northerner. Medvedovsky has a carefree air about him that is not typical of the people of the region. He is a jovial man, full of wisecracks, the "life of the party," who likes his drink and still has an eye for the girls, despite his four grandchildren. As a disabled war veteran he is entitled to free accommodations at a health resort for 24 days every year, does not have to pay to use urban transport facilities and gets a 50 per cent discount on railway tickets. As a pensioner he can work two months a year and still draw his pension. Last year he earned 300 rubles during the two months, and received a bonus of 100 rubles from the chief of the port besides. Medvedovsky is also active in community affairs. Twice a month he leads a study group on current affairs for the workers at the Kherson port.

All the people on Arctic Street have children and many have grandchildren. Some of the children are still in high school, others are now in college and still others hold jobs. Only a few of the children live in Kherson. Both sons of Sergei Perminov, who was a mechanic on an icebreaker, are also mechanics and make Kherson their home, as does his daughter, a naval architect. But Ilya Medvedovsky's son, a hydrotechnician, lives in Vladivostok. The daughter of Arvid Karklin married a fellow college student from the German Democratic Republic and went back with him to Berlin. Karklin is sorry his daughter lives so far away. This year Karklin and his wife plan to visit their daughter in Berlin; they want to see their year-old grandson. Karklin sailed as chief mate for many years. From 1954 until he retired, he was chief of the cartographic department in Murmansk. He was in New York in 1949. His ship, the *Murmansk*, ran into a storm on the way and had to lay up in New York three months for repairs.

Senior mechanic Anatoli Durov has made several visits to the United States. The first was in 1935-1936, after we concluded a trade agreement with the U.S. He was navigation officer of the *Kharkov*, which carried optical goods, radio tubes and other items. Then, during the war, he transported food supplies under lend-lease. That was a dangerous business. On one voyage German planes sank 16 out of a convoy of 24 ships. Another time their convoy was attacked by submarines. Durov managed to survive. After the war, in 1946-1947, his ship carried the last lend-lease deliveries from the United States. The last few years before retiring he sailed the Antarctic on the motor vessel *Cooperation*. Durov is a rather gloomy, reserved man, the exact opposite of his neighbor Valentin Domogatsky, also a senior mechanic, who is a lively, sociable fellow. He is a year older than Durov, 59, but looks much younger—you would not take him for fifty. Thanks to his youthful appearance and high spirits Domogatsky "fooled," as he says, a much younger woman into marrying him, and now has a 14-year-old daughter.

The residents of Arctic Street like their new way of life. They all know one another from the time they worked up North and get along well. That is evident from the way they keep their "colony" clean and ordered and the care they give the trees lining their street, but it is even more evident in the attitude of neighbors to one another.

Living History of the Arctic

Every adult on Arctic Street has led an interesting life, but there is one who deserves special mention in this connection, the unofficial elder of the community, the famous Captain Dmitri Chukhchin. He merits a book all to himself.

As we go upstairs to his study on the second floor Captain Dmitri Chukhchin jests that he "hasn't sailed much, only forty-five years," and all forty-five in the North. The study is furnished with an old-fashioned rocking chair, a desk and three bookcases. Among the books, which include Tolstoy, Dickens, Dostoyevsky and Mark Twain, I noticed Fridtjof Nansen's *'Fram' in the Arctic Ocean, Tragedy in the Arctic Ocean* by Frantishek Begounek, a member of the Nobile expedition, and *Sailing the Antarctic* by Chukhchin's friend and colleague Alexander Dubinin, the Antarctic captain. Chukhchin opened an old-fashioned leather album to show me pictures of his and his wife's forebears, native Northerners from Arkhangelsk, with open, resolute, intrepid faces. His great-grandfather, grandfather and father were all seafarers, said the captain. His father took him on his first voyage when he was fifteen. It was fore-ordained that he should be a seaman.

The village near Arkhangelsk where Chukhchin was born was famous for its sailors and captains. There was nothing else the men in the village could become. The village had 200 vessels, all sail; there was no need for mechanics or stokers. In summer only women and boys under 12 or 13 were left; all the men went to sea. They voyaged to the coast of Norway carrying timber, Russia's traditional export. There they sold it, using some of the money to buy fish cheaply. The fish they salted and sold in Arkhangelsk. Dmitri Chukhchin was taken on as ship's boy. That was his first step toward the captain's bridge.

From another album, this one in a modern plastic cover, the captain himself stared out at me, not a gray-haired, sixty-five-year-old pensioner, but first a blond young man in the uniform of a naval school cadet, then a graceful young man in a photograph signed "To my dearest Maria." The picture was taken the year he married charming Maria Nikolayevna, thirty-six years ago, that was. As I leafed through the thick album Chukhchin kept saying, "That was in England . . . that was in France . . . in America . . . in Italy." He sailed on many vessels in his long life at sea and visited many countries. It is easier for him to list the countries he did not visit. One photograph showed him as a famous captain. Most of the pictures were of ships and ice floes, ice floes and ships. But looking at them was not dull; they were recorded moments of a rewarding life.

Dmitri Chukhchin is the living history of the Soviet Arctic. This man's history tells us far more than official chronicles and cut-and-dried accounts, because his was the life of a wise, honest, brave man. He was a part of that history, of the everyday routine and the heroism of Arctic development. In 1932 the *Alexander Sibiryakov*, with Chukhchin as captain, was the first ship to travel the Northern Sea Route from Arkhangelsk to Vladivostok in 65 days, in one navigation season. It proved that navigation through the icebound seas of the Soviet Arctic was a practical possibility. This voyage was so significant that accounts of it are to be found in geography and history textbooks as well as the specialized literature.

During the war Chukhchin was skipper of a trawler. On a number of ships he made many voyages to the United States to take on supplies for the Soviet Union from the Allies. In 1942 the supply ship *Stary Bolshevik* (Old Bolshevik) which Chukhchin commanded was hit by a bomb in the North Atlantic and caught fire. The ship fell behind the convoy. The situation appeared hopeless. But they put the fire out and caught up with the convoy. The British



He may be retired, but he is not in mothballs. Captain Chukhchin is on the accident inquiry commission and the retired captain's council.

escort saluted with "Good for *Stary Bolshevik.*"

After the war Chukhchin began sailing on icebreakers. He was captain of the famous *Yermak,* the first big icebreaker in the world, built in 1898. Afterward, until he retired, he plowed through the ice on the no less famous *Krasin,* the ship that saved the Nobile expedition in 1928. Chukhchin made his last voyage in 1962. He showed me an album of photographs, a record of five years of his life, which the crew of the *Krasin* presented to their captain at the end of the voyage. The TV studio in Murmansk made a film about him called *The Captain Leaves the Bridge,* which was also shown in Kherson.

Despite his larger-than-life biography, Chukhchin is not at all the picture of a "sea dog" we get from books and films. He has none of the stereotyped attributes. He does not smoke or drink, for one thing. He does not wear a beard, nor does he have a stentorian voice. Despite this he was one of the best captains in the merchant fleet. He was not only respected as a captain, but liked as a man for his kindliness, compassion and even temper. Here in Kherson he is also a person to whom people are attracted and for whom his house is always open.

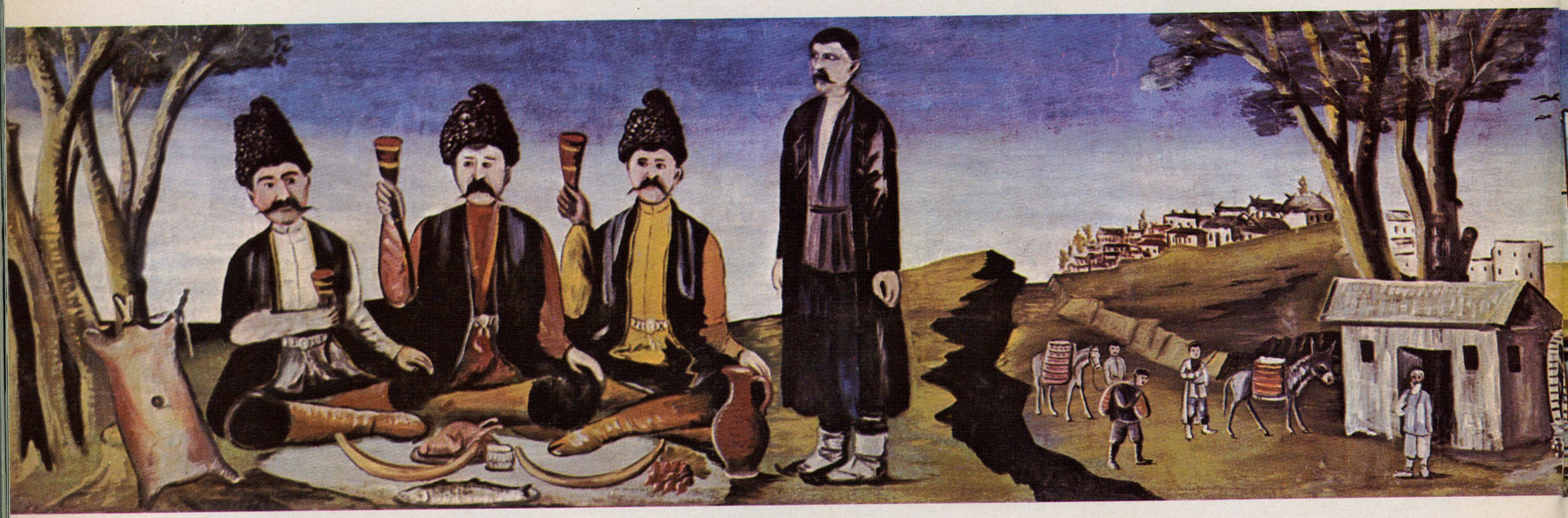
Chukhchin has reared not only his own children—his son is a hydrobiologist and his daughter an engineer—but also a large number of seamen who owe him their character traits as well as their knowledge. He is experienced in taking ships through ice floes and in human relationships, the reason he is an invaluable member of organizations like the Commission on Accident Investigation at the Kherson port and the Council of Retired Captains. Kherson port holds him in high regard. There is practically nothing Chukhchin does not know about fleets and the sea. He has a wide acquaintanceship among seamen. The port workers turn to him first when there is serious trouble.

I asked the captain whether he does not find life on land dull after such a very different life of sailing the Arctic seas from June to November every year for almost half a century. No, he said, he has had quite enough of the sea. Besides, he had planned to move south even before the war. Since his retirement he has had two pressing invitations from Murmansk to captain a vessel for at least one navigation season. He has refused both, feeling he has to put an end to his career at some point.

Dmitri Chukhchin has already grown used to land living. His life is filled with the past and the present, friends old and new, his children, granddaughter, garden and the world around him. And he has remained the same kind of person he always was—one more accustomed to giving than to taking.

FAME CAME LATE TO

NIKO PIROS



The artist loved his Georgian soil, its colors and texture. Pirosmanishvili's landscapes are full of nostalgia for his native mountains, valleys and rivers. His tones are carefully subdued. Bolder, sharper colors would distract from his purpose — to picture the people and animals who live in that marvelously fresh world he created.

MANI

BY KONSTANTIN PAUSTOVSKY
Novelist



Kakhetian Epos



Bear on a Moonlit Night

FAME CAME LATE TO NIKO PIROSMANI



Feast of Three Princes

Niko Pirosmanishvili (1862-1918) occupies a unique place in Georgian art. A self-taught painter, he created an original and highly individualistic style. This is an excerpt from Konstantin Paustovsky's novel Dash Down South.

THE KURA continued its muddy murmuring under the bridges, and the starry sky flushed faintly over Kakhetia, as if some one was holding a lighted match to the edge of a black, inverted crystal bowl. All was still, with only the donkeys in the sleepy yards near Metekha shifting and snorting and turning their warm, fluffy ears.

That wonderful time of the ordinary and familiar day was approaching, when for a few minutes everything becomes emptied of color. The sky, the ashy mountains, the blooming almond orchards all become gray and mysterious. Over all the shadowless, dust-sprinkled earth slowly floats the predawn silence in which you can hear the blood coursing through your stretching and sleep-weary body.

In this silence I have often thought at length about the artist who had created a grayish-black, miniature Caucasus. A Caucasus without shadow or sunlight, illumined by the light of the slowly seeping dawn. That Caucasus which appears only to drunks and vagrants trudging the gray sidewalks at this time of day. I thought of the artist Niko Pirosmanishvili, the destitute and great Pirosman.* But the first orange rays of sunlight on my face and the hoarse cries of venders dispelled these thoughts, and again the Tiflis day, wrapped in heavy blue sky and yellow dust, unfolded like a fiery narrative.

Occasionally, in the evening I would gaze at Pirosman's pictures in the light of a kerosene lamp held high. They troubled me. The old paints, the gray ash of dawn, the broken spines of the mountains, the primitive, at times seemingly printed, pictures of bloated princes awakened anxiety. A whole phantom world of priests, coffee laborers, timid paupers with dog-like eyes, kintos ** and janitors, donkeys and venders, feasting peasants and pitiful actresses from suburban theaters stood out from his oilcloths. Pirosman did most of his painting on black oilcloth and tin. Endlessly intriguing me was another whole world of wary beasts, listening intently to the sounds of the river and the night, beasts staring with most human eyes.

Pirosman was a plain Georgian, a railroad guard, peddler and tramp. He slept in the damp cellars of Nakhalovka and Avlabara, where he painted his wonderful pictures for a meal in a dukhan, a night's lodging, a bottle of cheap wine, to keep body and soul together on the hot streets of the city's outskirts.

A self-taught man, barely able to sign his pictures, he gave them, without visible effort, a perfection of line, a clear-cut, saturated composition and the most rigorous restraint in colors. His work revealed the fine reflections of Persian miniatures, a certain fabulous antiquity in the portrayal of some scenes—an antiquity reminiscent of the ascetic domes of Armenian churches, a childlike naïveté, strange to us Europeans. Pirosman knew well the colorfully sudden Tiflis nights, the weary dusty days, and the gray, snow peaks in the dry mist of dawn.

He painted without hesitation, applying spare and final strokes and lines, leaving the bare oilcloth for black. He painted as we might speak or drink, as a child cries or a ruddy-faced peddler laughs. Crowds of laborers and kintos watched him paint with surprising speed, and expressed their delight with wild cries and applause as portraits and Caucasian scenes were consummated on his oilcloth in half an hour.

I saw a portrait of him. Tall, calm, with a receding forehead and childlike eyes, he bore within him a bitterness, a lucid and mute sorrow for the life that he had given to his visionary and naïve dreams, and from which he had received only a

* Pirosmani or Pirosman (Russianized version), the abbreviated name of Pirosmanishvili.

** Kinto means peddler in Georgian.



Reindeer



Still Life

harrowing sense of wretchedness and fear.

In smoky dukhans reeking of wine fumes, he saw the humble despair of ambals * hoarse with fatigue, forsaken children, street musicians with hands trembling from hunger and drink, paupers with blue, sinewy necks, cigarette venders. He knew them all well—those whom life had condemned to dried tears, who polished the cobblestones of the Armenian bazaar and only rarely shed drunken tears over a bottle of Kakhetian wine, lamenting their mutilated and crushed souls.

He had no words for it. All this sorrow he expressed in the childlike simplicity of his seemingly unskilled lines, in the melancholy colors and the unbearable tension that filled some of his oils. And he was loved there in the dukhans, where five kopecks bought a meal of rotten beans.

Pirosman's life was blighted by a cruel and ruinous love—his love for the actress Margarita, a money-grubbing and coarse performer at a dusty, suburban park.

* Ambal—a porter who carries heavy weights.

Love came like a curse, like fate, to bring this gentle man a new and bitter misery. And he bore this love unblemished, sad and beautiful through the smoke of dukhans and all the hapless vicissitudes of his life.

Such was Pirosman.

He was "discovered" some years after his death. Several young artists, who happened to go into a dukhan near a railroad station, saw his pictures on a dark wall and were struck by the force of this unknown artist. Pirosman became their obsession. They sought out his pictures in cellars and remote shops, bought them and attracted public attention to this wonderful and undeservedly forgotten artist of the people. They studied his work, finding new depths, facility and brilliant, sagacious composition. These enthusiasts, profoundly moved by Pirosman, reconstructed the sad and plaintive tale of his life from interrogating kintos and from talking to grocers.

Questioned about Pirosman's last days, his Georgian friends said:

"Where were you before, katso?* Now you're looking for every poster of his, but when Niko was alive, nobody looked for him, though he was slowly dying of hunger. They buried him in the backyard of a cemetery for two rubles. Don't look for his grave, katso, you'll never find it."

Such is the fate of most geniuses: To die in oblivion and then, years later, to rise up above the hustling life that is as muddy as the Kura River. To rise up in all the clarity, purity and sorrow of his creation to evoke in the hearts of men passionate joy and disquiet.

At times Pirosman smiles, but wearily. Then we see the colorful dresses of children under an indigo sky, as if thousands of autumn leaves and patches of sky and sunlight were being driven by a wind down sun-flooded streets. Then tooters with comically distended cheeks play on their grandfathers' horns and grapes are the dull black of a morning. Then, too, his Caucasus and his windblown Tiflis stand out in blazing whiteness, autumnal gilt, summer fires and the mysterious gleam of moonstones. After seeing these one realizes what a wealth of color lived in this sad master.

Pirosman painted many portraits, many festive scenes, many peasants and lords, doormen, donkeys, children, many dark women with penetrating eyes, many taciturn highlanders and rebels. For this reason his oils reflect all of Georgia and all of the beautiful-as-amber Tiflis, the second homeland of all those who have lived in it for at least a little while.

Through the phantom sadness of Pirosman's oils, shines the captivating life of Transcaucasia, the doorway to legendary lands, as monotoned as the roar of mountain streams and as colorful as the costumes of Kurd women.

Pirosman's animals are remarkable. I recall the strange feeling I had on first seeing his *Giraffe.* It was late evening, silence reigned in the empty house, and a cloudy moon hung over the dead hill of David. I looked at the painting, and I was transfixed by the wild, moist and comprehending stare of a tall, yellow beast. It was slowly curving its neck, as if expecting to hear a cry in the empty rooms that would send it off in inexplicable fear into the hazy blue night.

* Katso—man.


Grape Harvest Feast


A Fisherman

BORIS SPASSKY:

TWO-TIME BIDDER FOR WORLD CHESS CROWN

By Yevgeni Bebchuk
Master of Sport



I FLEW INTO SUKHUMI the day the whole thing was over: Boris Spassky had won with a couple of rounds still to go.

Needless to say, when I finally found Yefim Geller down at the beach in the late afternoon, he didn't look very happy. I hesitated for quite a while before I went over to him. We were good friends, having played together for several years on the Soviet Armed Forces chess team. The Odessa grandmaster has been the team leader for a good many years.

We smoked our cigarettes and looked out at the sea, turning dark after sunset. The silence was broken by the third member of our group. As though hearing the question I hadn't asked, Ukrainian Master Yuri Sakharov, who groomed Geller for the match with Spassky, replied thoughtfully:

"So you wonder why the match ended so quickly. You can take my word for it, we lost Boris before the match began. We lost in the food store."

"What do you mean?"

"Just what I said: the food store. You know that Yefim has to be worked up to a fighting mood before getting down to a match. Well, we were resting in Sochi, where I did my best to get him to work up that fighting spirit. But one day we went into that food store to buy something for supper, when somebody grabbed us both round the shoulders. We turned around and there was Spassky, smiling and cheerful. 'You boys going back to the hotel?' he asked. 'Let's take a walk, it's a lovely evening!'

"I could almost see our Geller melting away; all of my effort to work up a fighting spirit wasted."

I told Boris this story after his match with Bent Larsen. He burst out laughing: "Yes, I remember that meeting, but I had no ulterior motive at all, honestly!" Turning serious, he added: "I simply believe and always will that heart-to-heart relations come first. Winning points should have nothing to do with it."

He has always been that way. Fifteen years ago, at a junior tournament, I remember Boris flatly refusing to congratulate his teammate for a victory. It turned out that this chap, finding himself in a tight position, played a mean trick. He wrote down the same move twice, and pushed the sheet of paper over to the other side of the table. His opponent was having time trouble and fooled by those two written moves, thought that the crucial moment had passed. He pondered over his reply and the flag went down before he made that control move.

"No matter how important that win was for our team victory, it wasn't fair," Spassky, a young master at the time, told the trainer of Leningrad juniors, Vladimir Zak.

Even then he felt that the respect due an opponent came first. Boris showed the utmost courtesy and tact to challengers of any age and class. Credit for that goes to Honored Trainer of the USSR Vladimir Zak, his mentor at the Leningrad Pioneer Club where he began playing at the age of nine. A little more than two years later young Spassky, with the rating of a first-category chess player, made the city junior team. Another two-year cycle of intensive training and millions of chess fans heard of a new 14-year-old master candidate. Boris played a great amount of chess willingly, and the experts were amazed at his style on the chessboard, most unusual for a player of schoolboy age. It was not an impulsive combination-type style, but restrained, and, at times, prudently cool, stripped of all surplus emotion and ornament.

Boris' next coach was Grandmaster Alexander Tolush, a first-rate tactician, who tried to put life into his young charge's game. As he put it, "to make the pieces dance on the board."

The gifted player made rapid progress,

and in 1953 he participated in a big international tournament in Bucharest. In the first round this sensational 16-year-old student defeated the aspirant to the world throne, Vasili Smyslov. Later came a dazzling win in a bewildering King's Indian Defense against Hungarian Grandmaster Laszlo Szabo, and the final scorecard showed that he tied with grandmasters for third place and the title of International Master.

Spassky's openings now included a very sharp King's Gambit and puzzling positions of the Janisch Variant in the Ruy Lopez, as well as the complicated systems of the King's Indian and Sicilian Defenses. With his youth, energy and talent his game flourished apace. Judge for yourself: In 1955 he tied Mikhail Botvinnik and Tigran Petrosyan for third place in the national championships, captured the world junior crown shortly thereafter, and a month later, won the coveted International Grandmaster title at the Interzonal Tournament in Goteborg.

The world realized that a new brilliant star had appeared on the chess horizon, that Spassky was steadily ascending the rungs to the world throne.

His third place in the Amsterdam Challengers' Round should have confirmed these radiant forecasts, but it did not turn out that way. No, there were no disastrous setbacks. Spassky moved ahead with ease and elegance to the Soviet Championship Finals, stayed up front for a long time and . . . failed to reach the interzonal stage. This was in 1958, when he lost in the very last round of a national title play to a friend of his own age, Mikhail Tahl. It happened again three years later when, in the course of 17 rounds in the USSR title tournament, he alternately held first and second places, only to earn big goose eggs in the last two rounds, in games with Victor Korchnoi and Leonid Stein.

Boris will remember that game with Stein for a long time. The national press insisted that Spassky, not Stein, be allowed to continue fighting for the world title, claiming that although something had gone wrong with him, he was still the stronger of the two.

The "unlucky" player's new tutor at the time, Grandmaster Igor Bondarevsky, raised strong objection.

"You've got to understand that Boris must prove to himself what he is really capable of doing. He, himself, has to believe in his ability to win."

Everyone now remembers how Boris shared first place with two other contenders in the national championships, how he later became the sole titleholder, and how he went on to win in international tournaments in Britain, Cuba, the United States and Yugoslavia.

And then came that match with world sovereign Tigran Petrosyan. Boris lost, but not like he did in the early sixties. True, he made a bad start: his game was erratic, while his opponent was in top form. Suddenly, a new Spassky emerged. He showed everyone that he had pluck and the will to win. Although he did not completely make up for lost ground, the fans and experts already saw a different man—concentrated, smiling and optimistic. . . .

Soon after his triumph over Bent Larsen, we went over to Spassky's apartment.

"What did you find toughest in your match with the Dane?" we asked him. "Were you bothered by his statements to the press that he would beat you?"

"Not at all. I even like to read such statements to figure out what's behind them. But Bent is a very decent, openhearted chap. He really believed in his lucky star, and that's why he talked that way. He wasn't boasting at all."

"Before he took you on in the elimination match, Korchnoi said that you play better than Tahl and, perhaps, better than he did too. Yet he'd find it easier facing you than Tahl."

"I suppose that's true if he says so. After all, he and I received our initial chess training from Vladimir Zak at the Leningrad Pioneer Club. We know each other well, and we played together on the same team so long. . . . Hard to say, when you know your partner too well, you find that it's easy and difficult at the same time."

And so, ahead of Spassky is his clash with Tigran Petrosyan in another bid for the latter's world laurels. And behind Boris are victories over such world-famous ace players as Yefim Geller, Bent Larsen and Victor Korchnoi. The coming tilt with Petrosyan will be stubborn, and I, for one, believe Spassky will win.

Here is Spassky's favorite game with his own analysis to give you an idea of both his chess and literary styles.

CARO-KANN DEFENSE

White—B. Spassky Black—A. Reshko

1. P-K4 P-QB3

The Caro-Kann Defense is quite popular now, but it is usually employed by passive-minded players. The main idea of this system is that Black temporarily declines a Pawn battle in the middle and strives, instead, as quickly as possible, to finish deploying his forces, especially the Queen's Bishop, before the King's Pawn move, P-K3. Only after this does he launch vigorous operations in the center. The result is that Black's position is solid, even though passive. The weakness of this system is that it offers White much too wide a choice of possible patterns of development, which provides not only chess, but also psychological, trumps.

2. Kt-QB3 P-Q4
3. Kt-KB3 B-KKt5
4. P-KR 3 BxKt
5. QxB Kt-KB3

Despite its seeming simplicity, this position is very interesting. Black has exchanged his Queen's Bishop for a strong Knight on KB6, believing, and rightly so, that the presence of both White Bishops in a position of a closed nature, is of no essential importance. Following 6. . . .P-K3, Black intends to put his pieces in a more convenient position with moves of Kt(QKt)-Q2 and B-K2.

6. P-K5

By replying here, with 6. P-Q4, White could have made his Bishops more active, having in mind a sacrifice of his Queen's Pawn in the event of 6. . . .PxP; 7. KtxP. However, I selected another scheme, and endeavored first of all to prevent a convenient deployment of the rival forces.

6. . . . Kt (KB)-Q-2
7. Q-KKt3

A reply of 7. P-K6 would yield nothing, because of 7. . . . PxP, with Black being able, and to his advantage, to effect a Pawn advance, P-K4.

7. P-QKt 4 P-K3
8. B-K2 Q-QB2

This is a stereotyped reply, after which Black begins to have difficulties in developing his pieces on the Queen's Wing. A stronger reply would be a natural 8. . . P-QB4, to which I intended to respond with 9. P-KB4, Kt-QB3; 10. P-QKt3 with an interesting game following such a continuation.

9. P-KB4 P-QR3

The consequences of a poor eighth move. The reply to an immediate 9. . . . P-QB4 will, of course, be 10. Kt-QKt5.

10. . . . P-QKt4

This is the start of a distracting demonstration on the Queen's Wing. White is ready for a sacrifice in an effort to get his scheme working.

10. . . . P-QB4

The following Pawn sacrifice deserves attention: 10. . . . BxP; 11. QxP, R-KB1; 12. QxP, P-QB4, with a subsequent Kt-QB3 and castling to the Queen's Wing.

11. P-QKt5 P-QB5

This frees the QB4 square for pieces on the Queen's Wing.

12. R-QKtl P-Q5
13. Kt-K4 PxP

And so, Black has won a Pawn, but at the same time, White has noticeably activated his own pieces.

14. 0-0

Naturally, 14. RxP is impossible in view of 14. . . . Q-QB3. And, in general, White's plan is not winning back sacrificed material, but most acutely mobilizing his forces for a decisive offensive on the entire front.

It is of interest to note that the White Rook on QKtl, while not making more than one move, has, nevertheless, played a vital part in the further course of struggle.

14. . . . RxP

Black captures a second Pawn, and later a third, but slows up still more in his own deployment. I believe it more sensible to to have replied with 14. . . . Kt-QB3 with my planned response of 15. P-Q3 providing a sharp game.

15. P-Q3 RxP
16. B-Q1 R-QR7

It is strange that Reshko still does not sense danger, otherwise he would have tried at this point to give his pieces more vigor by sacrificing the exchange through 16. . . . PxP. For instance, 17. BxR, PxB; 18. RxP, Q-QB3, 19. Q-Q3, Kt-QB4; 20. KtxKt, BxKt, with Black, despite the inevitable loss of the Pawn on QB7, having two Pawns for the sacrifice of exchange. Besides, he would be able to complete his deployment. As regards White, he evidently could have made a better reply, 18. R-QKt2, and not hasten to force events. In this case, a complicated situation would shape up, where, in my opinion, his chances would be preferable.

What are the results of White's demonstration on the Queen's Wing? It will suffice to compare the first and second diagrams. White's army is now fully mobilized and ready, at the first signal, to rush into attack, whereas Black has not had time to carry out his deployment to the end. Despite the material advantage Black enjoys, his position is most unreliable.

With his next move, White shows that the distracting operations on the Queen's Wing are over, and that the center of battle swings over to the opposite flank, where the Black King is the target of a direct attack.

17. P-KB5 KtxP

Black is unable to repel the onslaught of half a dozen White pieces plus a pair of Pawns. Here is where other continuations would lead: 17. . . . QxP; 18. P(KB)xP, QxP; 19. R-K1, with a winning attack following this; 17. . . . P(K)xP; 18. R(KB)xP with decisive threats of R(KB)xP, Kt-Q6ch, P-K6.

18. P(KB)xP P-KB3

No great hopes are promised by 18. . . . P(KB)xP, because of 19. B-KB4, Kt(QKt)-Q2; 20. RxP, R-QR4; 21. PxP, with Black being unable to beat off the threats of 22. B-KKt4 or 22. Kt-KKt5.

19. RxP(KB)!

This Rook sacrifice smashes the Black King's cover, and White launches an assault on the enemy's last strongpoint, the K4 square. The White Rook has to be removed, otherwise the fight will be over at once following 20. R-KB7.

19. . . . PxR
20. KtxPch K-Q1
21. Kt-Q5 Q-Q3

Should the reply be 21. . . . Q-KKt2, then the continuation would be 22. P-K7ch, K-Q2; 23. B-KKt4ch, K-K1; 24. B-KR5ch, etc.

22. B-KKt5ch K-QB1

It is impossible to reply with 22. . . . K-K1, because of 23. B-KR5ch, K-Kt-KKt3; 24. Kt-QB7ch.

23. B-KKt4!

The idea of the Rook sacrifice is in this move. The threat now of 24. P-K7ch is mortal. Here are possible variants: 23. . . . B-KKt2; 24. Kt-K7ch, K-QB2; 25. Kt-KB5, QxP; 26. KtxB, Q-Q4; 27. B-KB6, followed by 28. Kt-K6ch and 29. BxKt; 23. . . . Kt(QKt)-Q2; 24. PxKtch, KtxP; 25. R-K1, P-QKt3 (or 25. . . . R-QR8; 26. B-KB4, Q-QR3; 27. Kt-QKt6ch, QxKt; 28. RxR, K-Q1; 29. B-KKt5ch with White going on to win); 26. Q-KB3, B-KKt2; 27. Q-KB7; 23. . . . QxKt; 24. P-K7ch, K-QB2; 25. P-K8 (Queen) etc.

23. . . . KtxB
24. P-K7

This is the only, but sufficient, move for a victory.

24. . . . BxP

Stiffer resistance could arise from 24. . . . RxPch; 25. QxR, B-KKt2; 26. QxKt, Kt-Q2. But in this case, too, White, continuing with 27. RxP, should win, in view of the threat of 28. Kt-QKt6ch.

25. QxKtch Kt-Q2
26. KtxBch K-QB2
27. B-KB4 Kt-K4
28. Q-KKt7 K-QKt3
29. BxKt Q-K3
30. BxPch

Black resigns.



These figures, The Pledge, *stand on the site of the first concentration camp the Nazis erected on Soviet soil, in Salaspils, Latvia.*

Photographs by Yan Tikhonov

THE EARTH GROANS BEYOND THIS WALL

By Irina Kalitenko



The day the memorial was unveiled, on October 31, 1967. The concrete "guillotine" walls off the world of the living from the dead.

HERE THE UNVANQUISHED FOLLOWED THE ROAD TO DEATH. THE BULLET BROKE OFF MANY WORDS UNSAID AND YEARS UNLIVED.

INSCRIPTION ON THE MONUMENT IN SALASPILS

IN OCTOBER 1941 the Nazis brought a group of Soviet prisoners of war to a spot in Latvia which had once been a military proving ground. This barren swamp became the "death factory" of Salaspils. A few months later it held tens of thousands of prisoners from the Soviet Union, Austria, Czechoslovakia, Poland, France, the Netherlands, Belgium, Germany and other countries.

People gather from all parts of the country to pay the tribute of memory to the 100,000 men, women and children who were tortured to death at Salaspils. Three years ago an open contest was announced for a memorial to the prisoners of the death camp. There were 150 designs submitted, and the prizewinners were Latvian sculptors Jan Zarin, Lev Bukovsky and Oleg Skorainis. The first two are well known and have won republican and national prizes previously. Zarin, for instance, has 13 monuments standing on Latvia's territory, and his works are in the collections of the country's leading museums. The third prizewinner, Oleg Skorainis, is a young man, and his participation on the memorial was his professional debut. Although this was the first joint effort by the three sculptors, the ensemble has an extraordinary unity of thought and form. It was unveiled last October.

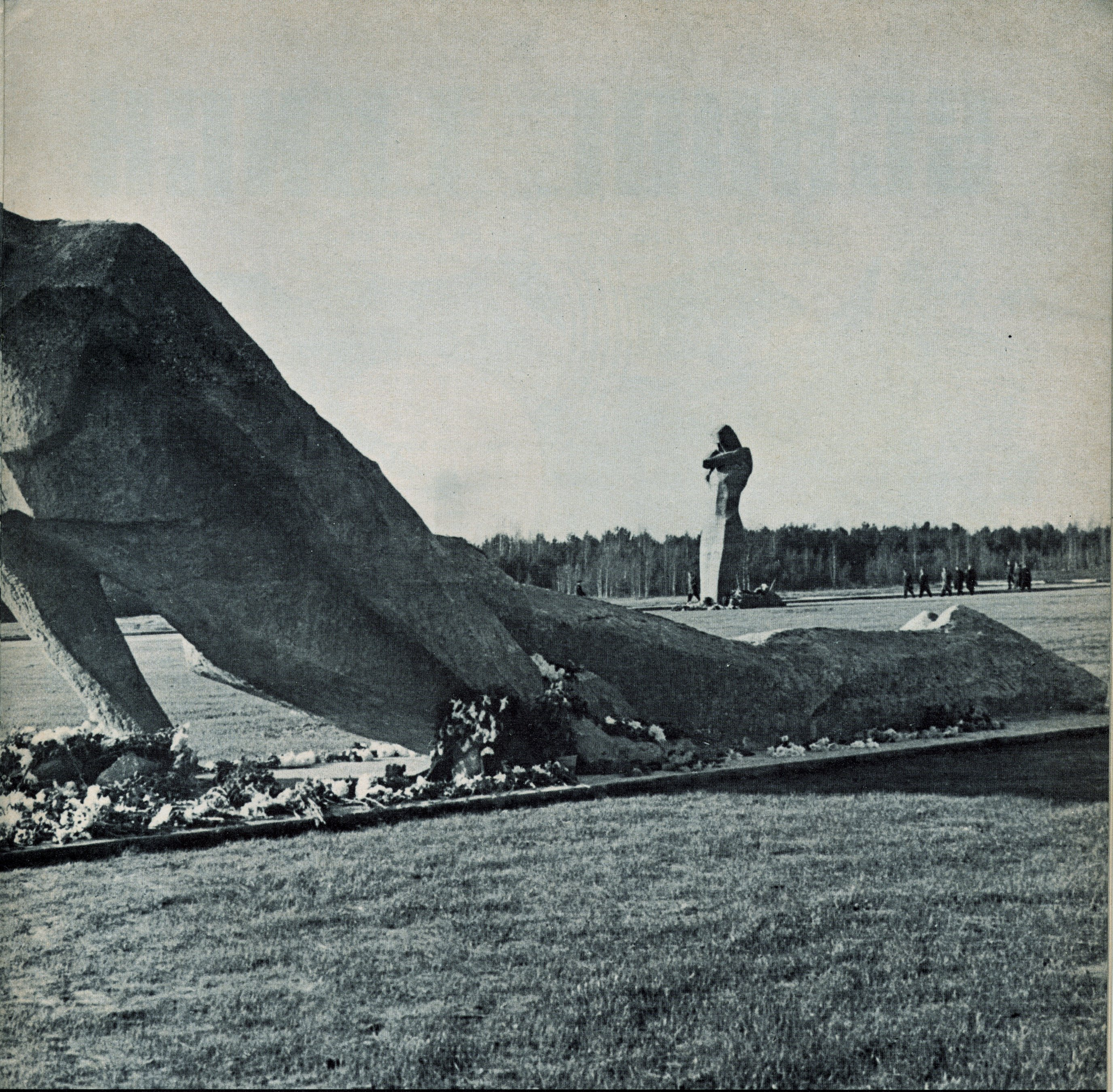
At the entrance to Salaspils is a huge stone wall which bears the inscription: "The Earth Groans Beyond This Wall." Past the wall, a symbol of the separation of life





The figures seem to grow out of the very ground the death factory stood on. This is The Unvanquished, *a man exerting a last impossible effort to rise and show his executioners that he remains unbeaten.*

A continuous pilgrimage to pay tribute to the 100,000 men, women and children from the Soviet Union, Austria, France, Belgium, the Netherlands and other countries the Nazis murdered at Salaspils.



from death, one stands facing the sculptural ensemble.

The impression conveyed is that the earth itself raised these figures from its bowels. The figures seem to have grown out of the ground the camp barracks stood on.

On the site of the women's barracks is "The Humiliated." Where the children's barracks stood is a group entitled "Mother with Children"—a strong and angry mother shielding children with her body.

On the other side of the field, where heather is planted, rises the "The Unvanquished"—a man exerting his last, impossible effort to rise from the ground and show his executioners that, though murdered, in spirit he remains unvanquished.

The ensemble is consummated with "The Pledge"—three people of different nationalities standing side by side to symbolize the unity of peoples in the struggle against the nazi executioners. All the figures are made of concrete and are 53 feet high.

Encircling the ensemble is "The Road of Suffering," along which tens of thousands of people walked to their deaths: young people with hopes for a future, those who had lived out their days, children who were not destined to live beyond their childhood. They, like the 20 million Soviet citizens who died at the fronts, belong to the ages.

In memory of them all, a metronome stands on the site, evenly striking out the rhythm of a beating heart.

SCHOOL LUNCH



Drawing by Vladimir Matyukhin

IN '43

By Vasili Aksyonov

Vasili Aksyonov, 37, graduated from the Medical Institute in Leningrad and worked as a doctor for four years. His first short stories were published in *Yunost* (*Youth*) magazine in 1959. A year later the same magazine published his novel *Colleagues*, a great success. Since then Aksyonov has written the novels *Ticket to the Stars*, *Oranges from Morocco*, *It's Time, My Friend, It's Time* and the satiric *Overstocked Barrels*, as well as a number of short stories.

OH, YES, there is such a theory, or hypothesis, I should say. It is assumed that the movements of Mars' satellites Phobos and Deimos are somewhat arrested by that planet's atmosphere. Consequently they must be hollow inside, don't you see? And we know that hollow bodies can be created only . . . eh, how?"

"Only, only . . ." babbled the first lady like a schoolgirl.

"Only artificially."

"But of course!" cried the cleverer second lady.

"Yes, artificially. And that means they were created by intelligent creatures."

I regarded the man who was recounting this fascinating tale and wondered where I had seen him before. He was sitting opposite me in the sleeper compartment, swinging an elegantly crossed leg. He wore a blue well-tailored but unpretentious suit, an immaculately white shirt and a tie to match. Everything about him indicated that he was certainly not letting himself run to seed, that he was not so old, for that matter, no more than 35. A slight puffiness of the cheeks gave his face a benevolent and pleasant expression. These weren't the things that gave me the feeling I had met him before. It was only his strangely familiar way of contorting his lips and the distant but familiar intonations of his speech that made me scrutinize him more closely.

"The latest finds in the Sahara and Mesopotamia allow us to presume that in times long past the Earth was visited by creatures from outer space."

"Maybe they were the Martians?" gasped the ladies in unison.

"Perhaps. Who knows?" he said with a smile. "Who knows but that we are the direct descendants of the Martians," he concluded gaily, and having plunged the ladies into confusion, he picked up his newspapers.

He had a thick stack of them, with different mastheads, and was reading them one after the other. After finishing one, he would place it on the little table and press it down with his elbow.

Outside, bronze pines and young copses sped past, with bright sunny glades flashing by in between. The forest was warm and serene. I visualized myself walking through it, pushing the branches aside and winding my way through the ferns, imperceptible cobwebs settling on my face—and issuing onto a hot glade, where squirrels regarded me from all sides, bringing pleasant indolent thoughts to mind.

For some reason all this most decisively contradicted what it was that bound me to this man hidden behind his newspaper.

"May I see your paper for a moment?" I asked, pulling lightly at the sheet. He gave a start and peered over it. That was when I recognized him.

We had been in the same class at school during the war, in an overcrowded Volga town all covered with yellow dirty ice. He had been left back for three years, and I had caught up with him in the fourth grade in 1943. I had been a weakling, clad in padded coat, huge top boots and dark blue pants, a donation from the Americans. The pants were stiff, of denim, but by that time they were almost threadbare, with two round patches of a different cloth on the seat. Still, I was proud of those pants. Nobody was ashamed of patches in those days. I was also proud of a trophy fountain pen my sister had sent me from the army. But my pride in it was short-lived, because He took it away from me. He took away everything of any interest to him. And not only from me, but from the whole class. He had two pals—the humpbacked Leka and the skinny, pallid, hot-eyed Cossack. Evenings they sold cigarettes in front of the Electro Motion Picture Palace to wounded men and inordinately husky women. I was friends with Abka Ziperson, and we often went to the movies together, climbing through a coal hole and sitting up in the balcony, near the projection room. Those were the days of George of the Dinkie Jazz, and Antosha Rybkin, and the ludicrous Hitler who always landed in the soup—all you had to do was flick him on the head between his horns and he was finished. The real Hitler was not at all like that—we knew—and sitting in the darkness next to the projection room, we thought up all kinds of tortures for the real one. Put him in a cage and wheel him through the towns so that people could spit and throw cigarette butts at him. No, better to dip him in molten lead. In China they had a swell torture called "A Thousand Pieces."

When we got out of the movies, we always saw them hopping to keep warm and yelling:

"Hey, you rolling stones, buy our cigarettes!"

Abka and I tried to bypass them and keep in the shadows, but they never noticed us anyway. At night they never recognized us, as though we were not in the same class, as though they did not make us give them our school lunches every single day.

At school we were given lunches of sticky rye buns. The monitor would carry them upstairs on a large plate, and we would stand on the upper landing watching that wonderful dish floating up from the school's cold bowels.

"This is interesting news, isn't it?" I asked him, pointing out the place in the newspaper where the interesting item was featured.

He glanced at it, smiled, and commenced to tell me about the event in detail. I nodded and looked out of the window. I just could not bear those blue eyes because they had contemplated me expectantly every day from behind the corner of the school.

"Hand it over," He would say, and I would give Him my bun with my finger dents still fresh on it.

"Hand it over," He would say to the next boy, and Leka and Cossack would be in attendance next to Him.

I would go home and wait for my baby sister. Then we would both wait for our aunt. Auntie would return from the market with a loaf of bread and potatoes. Sometimes she came empty-handed. Auntie fought for me and my baby sister with submissive but practiced fury. Every morning as I got ready to go to school, I saw her passing under the windows, broad-shouldered and squat, with a stub nose and thin compressed lips.

One day she said:

"Nina brings home her lunches, and you don't. Rustam brings his lunch home, and so do all the other kids in the yard, but you eat yours all up at school."

I went out and sat down on a broken iron bed near the terrace. Several rooks were hovering in the gray darkening sky over the linden trees. Girls in military uniform were walking past our fence. What did rooks feed on? Insects? Worms? The air? Things were fine for them. But maybe somebody took everything away from them too? The weathercock on our roof creaked sharply. Some dive bombers were flying low over the town. What was going to happen to me? Auntie had been washing clothes all night long. Behind the screen the water streamed, splashed and gurgled. The pools grew darker, the waterfalls thundered, and Hitler in funny striped shorts was puffing and snorting in the soapy water. Auntie was kneading him with her knobby hands.

The next day was an eventful one. Our buns were smeared with a thin layer of lard sprinkled over with egg powder. I tore a sheet out of my copybook, wrapped the bun in it and put it in my bag. Behind the corner, all tremulous with valor, I grabbed Him by a button and struck Him. Abka Ziperson did the same, and some of the other boys followed suit. A few moments later I was lying in the snow with Cossack on top of me and Leka stuffing my lunch into my mouth.

"Come on, now, bite it!"

"That's exactly what happened," he was saying. "I know, because a close friend of mine had something to do with it. The newspapers give just the bare facts—they sometimes slip over the details, naturally."

"I see," I said, and thanked him. "It's very good of you."

The ladies were meanwhile chatting pleasantly. They treated each other to cherries, saying that those were not cherries at all—you could only find the real thing in the South. Suddenly they discovered that they were both from Lvov, and, my God, it looked like they had even lived on the same street and gone to the same school! There were so many coincidences that the ladies finally merged into a single enormous whole.

The next day, as soon as school was over, I stuffed my notebooks in the bag and turned around to look at the last rows. Cossack, Leka and He were sitting together at the same desk and leering at me. My face must have told them I would fight for my lunch again. They got up and left. I sat on at my desk for a long time, waiting for everyone to leave. I did not want to draw Abka and the other boys into this senseless affair again. When everyone had gone, I checked my slingshot and poured several stones from the bag into my pocket. If they were behind the corner again, I would let them have three charges and get each of them in the mug. Then, like Antosha Rybkin, I would grab one of them by the foot in a judo grip—maybe Leka or Cossack, but Him best of all, and fling Him down on his back. Then let come what may. Let them beat the hell out of me, but I would do the same thing the next day.

Slowly I descended the stairs, fingering the stones in my pocket. Somebody jumped me from above, and He was there in front of me. Somebody else pulled me by the boots. I heard a light contemptuous laugh. They worked fast. They pulled off my boots and unbound

the rags on my feet. Then they hung all those stinky rags on the banister and ran downstairs.

"Here's your boots, bravie!" He shouted, and my boots somersaulted up into the air. Guffawing merrily, the gang left. They had forgotten to take my lunch along.

"Will you have dinner with me in the dining car?" I suggested.

He put his newspaper aside and smiled.

"I was just about to invite you to have dinner with me," he said. "You beat me to it. Please let me treat you to dinner."

"Oh, no," I cried in great agitation. "As we used to say when we were boys, 'I'm leading.' Remember?"

"Oh, yes," he said, looking at me curiously.

I had cried. I had gathered my foot rags and bawled. I had felt so completely defeated it was a long time before I got over it. It was years before I could forget that light, contemptuous laughter and the fingers that had pressed into my face. The bell rang, and there was a loud stamping of feet, and an avalanche of seniors rushed down past me with whoops and cries.

I walked out into the street, crossed it, climbed through a gap in the iron bars of a fence, and strolled down the path of an old neglected park toward whose farther end a crowd of seniors were running. I followed slowly. I wanted to see them play soccer.

There, near the summer reading room which had been pulled down halfway for firewood, were the playgrounds worn smooth by our school. Dividing into two groups, the seniors ran back and forth over it. Each attack was invincible, no matter which side it was directed at. It was swift and wild, with inevitable losses and victories for all. Waves of sweat rolled up and receded as I sat at the edge of the field, and big strong legs, *valenki,* boots rushed by me. As if wishing to assure me of their strength, they fought for their right to the ball still more furiously—those seniors.

Sinking up to the waist in the deep snow, I threw them the balls that flew out into the park.

I still wonder whether it was defeat or victory. Sometimes they—Cossack, Leka and He—stopped me and took my lunch away, and I did not resist; and sometimes, for some strange reason, they left me alone, and I carried my bun home, and in the evening we drank tea with slices of sticky rye paste.

We walked down the length of the cars, and I opened the doors to let him through first, and when he was in front, he opened the doors to let me through. I was lucky—it was I who opened the dining car door.

Somebody had found out that Abka Ziperson's mother was working in a hospital.

"Listen, Old-Woman-Who-Shuffles-Across-the-Street, why don't you bring us some glucose from your ma?" they demanded.

Abka refused for a while, but when they tore his schoolbag to shreds, he brought them a few ampules. They liked the glucose—it was sweet and nourishing. Ever since then they nicknamed Abka Glucose.

"Hey, Glucose!" they would call, "Come over here!"

I don't know what Abka suffered from most—the fact that he had to steal, or that he was given such a silly name.

In any case, I once saw him fighting them. I joined in and we were both badly beaten. Each of the trio was stronger than anyone else in our class. They were three years our senior.

Of course we could have united and fought them together, but according to our school code you could only fight one person, and only till the blood began to flow. Our boyish logic would not permit us to strike anyone weaker, or for three to gang up on one, or for the whole class to strike three. That was the whole trouble—they fought for food, heedless of the code. And what was worse, it was not in defense. They were older.

"Why doesn't he recognize me?" I wondered.

The dining car was deserted, well-appointed and clean. The tables shone in their white starched cloths and only one of them, obviously vacated some time ago, still held the traces of a generous feast.

I did the ordering. Money was no object. I chose the best brandy. This was no time to skimp. It was just the moment to go all out. Too bad that I was restrained by the usual dining car menu of pickled soup, shashlyk and plum compote.

I spoke to him amiably about the change of seasons, and stared at his hands, at the little red hairs protruding from under his watch bracelet. Then I lifted my eyes and recalled still another interesting fact.

His heart was not on the left side but on the right. Later I learned that this phenomenon was called dextrocardia, that it was quite rare, and that only a handful of people were born that way.

Early in the school term, before they had begun to take our lunches, He had bet with us on it. Bet lunch.

"Let's bet my heart's on the other side," He would say, unbuttoning his shirt proudly.

When we found out about this peculiarity of His, He resorted to coercive blackmail.

"Will you bet?" He would ask, sitting down next to you and twisting your arm. "Will you bet?" And He would unbutton his shirt.

"Thump-thump, thump-thump," His heart beat calmly and measuredly on the right side.

The heavy shiny surface of the pickled soup was disturbed by the rhythmical rocking of the car. The amber drops of fat trembled, gathering around the little slices of sausage floating on the surface, and in the recesses of this broth lay all sorts of ingredients—slices of ham, pickles and pieces of chicken.

"This is excellent bread!" I said. "Remember the bread we used to eat during the war?"

"Ah, yes," he replied. "It wasn't so good, was it?"

I mustered up the strength to look him in the face.

"Remember our school lunches?"

"Yes," He said firmly, and I realized from his tone that he had as much stamina as before.

"Those sticky rye buns, remember?"

"Yes, yes," he smiled. "They were pretty awful buns. . . ."

My legs trembled violently. No, not now. No, no. Let him eat his meal. I wanted to see him eat it. Let him finish and I'd pay.

"The lard and egg powder, remember?" I said, laughing lightly.

"The Second Front?" He smiled back.

"But we loved oil cakes best."

"Yes, it was a real treat," he laughed.

What the French do is pour out brandy, spit in it, and throw it in the face of people like him. Collaborationists.

"How about a drink?" I said, raising my glass.

"Your health," he replied.

The *shashlyk* was served.

Chewing the juicy, well-roasted meat, I said:

"Of course this isn't the Aragvi Restaurant in Moscow, but. . . ."

"It's not bad at all," he murmured, nodding as if he were listening to the flow of his inner juices. "The sauce isn't exactly *Tkemali,* but. . . ."

I nearly screamed: "You glutton! You lousy glutton! You know all about wine, and women too, I suppose. Are you still carrying my fountain pen in your vest pocket?"

Pulling myself together, I resumed our table patter in the given rhythm and the necessary tone.

"It's a surprising thing," I said, "but the concept of 'food' seems to have become more complex with the march of time. So many arguments are raging around that concept, so many nuances are contained in it. . . ."

"Ah, yes," he said readily. "And it's really a very simple concept, isn't it?"

"Yes, very simple indeed. Food. The simplest and most important thing for the human being."

"I think you are exaggerating a little," he smiled.

"No, really. Food and women are the most important things on earth," I went on with my naïve mystification.

"For me there are things more important," he said seriously.

"What are they?"

"My work, for instance."

"Oh, that comes afterward."

"No, you don't get my meaning. . . ."

He began to develop his idea. I could see that he had not recognized me. I could see that he would never recognize me, just as he would never recognize anybody from our class, except Leka and Cossack. And I understood why he would not recognize any of us. For him we had not been separate entities; we had been the mass with which he had had to fuss a little from time to time.

"Oh, sure, how the hell can I get your meaning!" I suddenly shouted rudely, unable to contain myself. "Of course, for you food doesn't mean a damned thing! You're a direct descendant of the Martians, aren't you!"

He stopped to look at me out of narrowed eyes. His mouth worked.

"Look," He said quietly. "You can't spoil my appetite, see?"

I fell silent and went back to my *shashlyk.* The bottle of brandy was closer to me, and it was never too late to spit into it. Let him only eat his meal, and I'd pay!

Next to us sat a man in a cheap checkered shirt, but there was a gold watch on his wrist. His head hung low over his beer, and he was whispering to himself. He was very drunk. Suddenly he raised his head and shouted to us:

"Hey, you! The Black Sea, un-erstand? . . . Sevastopol, see? Torpedo boat."

He dropped his head, and a low rumble issued from the depths of his chest.

"Waiter!" he called, "Can you remove that man?" He pointed not to me, but to the drunkard. "To avoid any excesses on his part."

"Oh, let him be, said the waiter. "He's not bothering you, is he?"

"The Black Sea . . ," grumbled the man. "Torpedo boat, or maybe I'm exaggerating? . . ."

"Do you really think you are a descendant of the Martians?" I asked him.

"Why not? Who knows?" he said placidly.

"The Martians are nice guys," I said. "With them everything is normal—they've got arms and legs and hearts on the left side. But you. . . ."

"Now just a moment," he said. "I'm telling you, you can't spoil my appetite, so don't try. I can pay for this dinner myself, you know."

I changed the subject, and everything was smoothed out in a few moments. Our dinner proceeded in a brilliant stream of smiles and jokes. So this was what he was like now—a real brick. Cast-iron nerves.

"Look, we haven't even introduced ourselves yet," I exclaimed. I stood up and gave my name, holding out my hand. He also stood up and clasped my hand.

His name was different. It wasn't he at all! It was a completely different man.

The dessert was served.

QUERIES FROM READERS

QUESTION: Have you any science fiction fans? Do you publish American science fiction in Russian translations? (Mike Montgomery, Denver, Colorado)

ANSWER: Science fiction is extremely popular in our country. Scientific adventure stories by Soviet and foreign authors are published in editions that run into millions of copies. There are Russian translations of books, collections of stories and magazine stories by about two dozen American writers of science fiction, published in editions of 100,000 and more copies. The most popular American science fiction writers here are Ray Bradbury, Isaac Azimov, Anne Warren Griffiths, Clifford Simak, Henry Kattner and Robert Sheckley. More than one million copies of books by these authors alone have been printed.

QUESTION: I would like some information on the cost of funerals in the USSR. (L. A. Pouliot, Detroit, Michigan)

ANSWER: Funerals may cost from 30 rubles to 100 rubles, depending on how well-to-do the family is. This includes the price of the coffin (from 6 to 60 rubles), mourning articles (from 5 to 10 rubles) and payment for a cemetery plot (from 4 rubles 50 kopecks to 8 rubles). Cremation costs 5 rubles.

The above sum does not include fees for music by an orchestra or for religious rites.

QUESTION: Please set aside a spot in an issue on the icebreaker* Lenin *and her trips. Whatever happened to the icebreakers* Krassin *and* Yermak*? (Harry E. Black, Spokane, Washington)

ANSWER: The icebreaker *Lenin*, the first nuclear-powered surface vessel in the world, was built in Leningrad in 1959. It has a displacement of 16,000 tons, is 440 feet long, has a 90.5 foot beam and is powered by engines with a capacty of 44,000 horsepower, making it the most powerful icebreaker in the world. It has three atomic reactors: Two of them provide all the power required, while the third is held in reserve and is used only when one of the other two is switched off for repairs. Operating at full capacity, the ship's engines use up between five or six pounds of Uranium-235 in 100 days. Steam engines of similar power operating at full capacity for 100 days would require 27,500 tons of black oil.

The ship provides excellent working and living conditions for its crew and staff of researchers.

Between 1960 and 1965 the *Lenin* covered more than 85,000 miles during the Arctic navigation season, of which nearly 65,000 were through ice. It lead about 500 vessels along the most difficult routes.

The icebreaker *Krassin* was built in Britain in 1916. It has a displacement of 10,800 tons, is 323 feet long and has a 71-foot beam. Up until 1927 it was called the *Svyatogor* and then was renamed in honor of Communist leader Leonid Krassin. In 1928 the *Krassin* participated in the rescue of the Italian polar expedition under Nobile and took the group aboard. In the past few years this veteran of the Arctic has taken 850 ships along the Northern Sea Route from Murmansk to Vladivostock, traveling about 100,000 miles through ice.

The *Yermak* is the oldest icebreaker in the Soviet Arctic fleet. It is 320 feet long, has a 71-foot beam, a displacement of 8,730 tons and a 9,390 horsepower engine capacity. It was built in Britain in 1899 according to the idea and at the order of the Russian Admiral Stepan Makarov. It was the first icebreaker in the world capable of moving actively in thick ice and getting seagoing vessels through it. In 1900 Alexander Popov, pioneer in radio, sent the first radiogram in the world to the *Yermak*, reporting that there were fishermen on an ice floe carried out to sea. The *Yermak* located and rescued them.

The successful principles and design of the *Yermak* were later incorporated in other icebreakers. In 1918 the *Yermak* took vessels of the revolutionary Baltic Fleet from Revel (Tallinn) and Helsingfors (Helsinki) to Kronstadt. Since 1934 it has annually taken ships through the Kara Sea and the Laptev Sea. In 1938 it helped to remove the Ivan Papanin polar expedition from an ice floe off the eastern coast of Greenland. The *Yermak* was decorated with the Order of Lenin in 1949, on its fiftieth anniversary. In 1964, after 65 years of service, it was laid up for good in the Murmansk roadstead.

QUESTION: I would like to know the history of the Ukrainian* bandura *and its popularity in the Ukraine. (Wasyll Gina, New Haven, Connecticut)

ANSWER: The *bandura*, a Ukrainian pizzicato instrument, is first mentioned in sixteenth century literature. It has a broad, shallow, bowl-shaped body. At the neck the strings are not pressed down but are plucked to form a bass accompaniment to the many strings stretched along the right side of the sounding board which carry the melody.

Wandering musicians played the *bandura*, also known as the *kobza*, to accompany their singing. In the eighteenth century *bandura* playing was fashionable at the court in St. Petersburg.

Today the *bandura* is one of the main instruments in professional and amateur folk instrument groups in the Ukraine. It has been improved over the centuries, and there is now a type of *bandura* for symphony orchestra. Instruction in the *bandura* is given at a number of music schools in the Ukraine and at the Kiev Conservatory.

QUESTION: Can you give me some information about the great rivers of Siberia east of the Ural Mountains and their power capacity? (Murray Brookman, San Francisco, California)

ANSWER: The vast majority of Siberia's rivers rise in the Altai and Sayan mountains and the mountains east of Lake Baikal, all of which form a wide belt along the southern borders of Siberia. Most of the rivers flow from south to north, across the steppe, forest and tundra zones. Their upper reaches have the characteristics of all mountain rivers—deep valleys cut into rock, stony beds and many waterfalls.

As a rule Siberia's rivers empty more than 70 million cubic feet of water annually into the Arctic Ocean. The Ob, Yenisei and Lena rivers account for more than 70 per cent of the flow. The Ob basin covers most of the West Siberian depression. The right bank of the Yenisei basin is situated within the Central Siberian Plateau, from 1,640 to 2,300 feet above sea level. The tributaries of the Yenisei (the Angara, Podkamennaya Tunguska and Nizhnaya Tunguska) and most of the Lena tributaries have big falls, and in some places their valleys turn into gorges. This is particularly true of the basins of the Yana, Indigirka and Kolyma rivers, which flow for the most part through mountain regions east of the Lena.

Siberia's biggest river is the Lena, 2,695 miles long with a flow of almost 18 million cubic feet a year and potential power resources exceeding 144 billion kilowatt-hours. Although the Yenisei is shorter—2,389 miles—it has a greater flow—20 million cubic feet and potential power resources of 158 billion kilowatt-hours. The Ob, the shortest of the three (2,284 miles), has less hydropower resources (51 billion kilowatt-hours). The Angara, on which Bratsk Dam stands, is a comparatively short river (1,165 miles), but its power potential is 94 billion kilowatt-hours.

Another of our large rivers is the Amur, 1,755 miles long, with an annual flow of 12 million cubic feet and a potential of 85 billion kilowatt-hours. The Amur flows into the Pacific.

QUESTION: I would like more facts on civil aviation in the USSR. (C. P. Jessup, Bala-Cynwyd, Pennsylvania)

ANSWER: The civil air fleet plays a significant part in the country's economic life. Its planes perform more than 100 types of work in the national economy, scientific research, the medical services and other areas of the country's life. In 1968 Aeroflot planes will have carried about 62 million passengers and more than 1.5 million tons of freight. In 1970 the number of passengers is expected to reach 75 million. The Soviet Union has about 311,000 miles of domestic air services. Aeroflot has agreements on air transport with 54 countries.

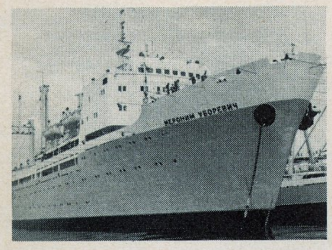
Flying is also a popular sport. Our fliers hold 253 of the 650 world records registered by the International Aeronautical Federation. The records were set with Soviet-built supersonic jet planes, giant transport planes, helicopters and sports planes.

Our fliers captured first place at the Fourth World Aerobatics Championships.

QUESTION: I would like some information about libraries in the Soviet Union. (Gary Shearer, Kansas City, Kansas)

ANSWER: The Soviet Union has about 400,000 libraries with 110 million registered borrowers and a total of 2 billion books. There are both general and specialized libraries. For children there are 200,000 libraries at schools and 5,000 special children's libraries. The government allocates 100 million rubles annually to replenish the public libraries alone, purchasing up to 80-100 million books a year for them. No charge is made anywhere for the use of books or reading rooms at libraries. The public libraries have a staff of 500,000 librarians.

AROUND the COUNTRY



SEAGOING FACTORIES

The Soviet Union is one of the world's five biggest fishing nations with a fleet of 20,000 self-propelled fishing, processing, refrigerated, research and exploratory vessels. Some of the refrigerated trawlers are actually floating factories.

At the International Fishing Industry Exhibition held in Leningrad last summer, the Soviet section displayed the *Ieronim Uborevich* floating fish cannery built at the Admiralteisk Plant in Leningrad. The factory ship of 15,300 tons displacement, with two main engines of 4,000 horsepower, has a capacity of 20 tons of frozen fish and 13 tons of fish flour a day.

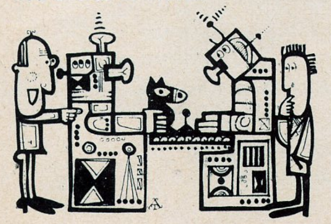
The *Ieronim Uborevich* will sail the middle latitudes of the Pacific for eight or nine months and, like an inhabited island, will service the vessels fishing in the area. The ship provides its crew of 520 with normal living and working conditions. Facilities include comfortable cabins, big messrooms and lounges, a dentist's office and an operating room, a library, laundry, barber shop, post office, delicatessen and Russian baths.

ACROSS THE OB

Another high-voltage transmission line will soon cross the deep Ob River in Siberia. Metallurgists have prepared two giant supports to be set up on both river banks. Thanks to the 616-foot height of the structures, the inevitable sagging of wires will not interfere with navigation in any way.

21ST CENTURY CHESS

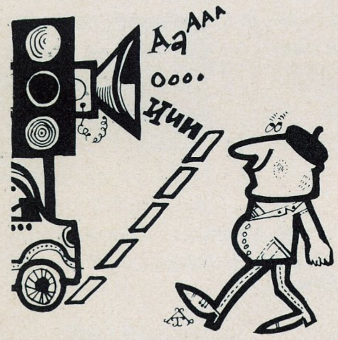
Chess games played by electronic computers will be a 21st century sport," predicts Victor Glushkov, Vice President of the Ukrainian Academy of Sciences. But these matches will not be like the computer-run games of today in which the machines operate by a given program. Man will give the computer only ideas, and the machine itself will have an unlimited choice of moves.



NAPOLEON'S ABDICATION FOUND IN YEREVAN

A rough draft of the act of abdication signed by Napoleon in April 1814 has been found in the archives of an Armenian musicologist and collector, Vasili Korganov (1865-1934). It is written on ordinary paper that is faintly yellowed, but otherwise in good condition.

Preserved in the personal archives of Nicholas I, Emperor of Russia, it was later bought by Korganov, who had a rich collection of Goethe, Beethoven, Balzac and Pushkin manuscripts. The document is now in the National Museum of Literature and Art in Yerevan, with the rest of Korganov's papers.



TALKING TRAFFIC LIGHT

Pedestrians are finding it harder and harder to get across wide streets before the red flashes on. To assist them, the traffic authorities in Leningrad have hooked up a tape recorder to an ordinary three-color traffic light. It tells pedestrians when it is safe for them to cross.

DIAGNOSING DISEASE FROM DREAMS

Diseases can be diagnosed from dreams, says Dr. Vladimir Kasatkin of Leningrad.

There is nothing mystical about prophetic dreams. They coincide almost completely with the length of the incubation period of a disease.

"Illness" dreams, unlike ordinary dreams, are usually obsessive and of the same kind, colored by the patient's education and occupation.

If you don't dream, that may also be a "distress signal" sent by the nervous system. Fewer dreams than usual may mean a weakening of nervous processes or mental activity. Responsible, for example, may be higher intercranial pressure. Much research, including that of Soviet Academician Pyotr Anokhin, indicated the existence of "prophetic apparatus" in the human brain.



MILK WEEK

Moscow recently had a Milk Week, organized by the Ministry of the Meat and Milk Industry, the Trade Ministry and the newspaper *Vecherniaya Moskva*. Milk is the main ingredient of more than 500 dishes. Experts say every Muscovite should consume 529 pounds of milk products annually. Muscovites are fond of milk, and the actual consumption figure today is close to 440 pounds a year. New milk products were put on the market for residents of the capital during Milk Week. Scientists, doctors and chefs were available for consultation. Many more milk products appeared on the menus of cafés, lunch counters and restaurants.

CURATIVE PERFUMES

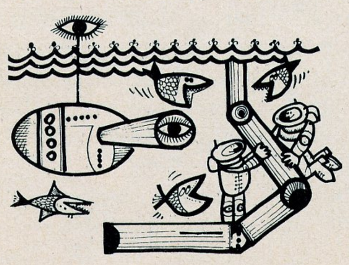
It won't be long before perfumes will be rated by quality, uniqueness and curative properties. The idea is based on phytoncides, unusual antibiotic substances contained in plants.

The cosmetics laboratory at the USSR Research Institute of Synthetic and Natural Perfumes has already worked out a method for synthesizing a vitamin from linseed oil. The vitamin has been incorporated in various creams and pastes.

Biologically active cosmetics cannot cure diseases, but they may have a certain prophylactic and tonic effect. The curative properties of the creams must not, of course, affect the fragrance in any way.

UNDERWATER TV

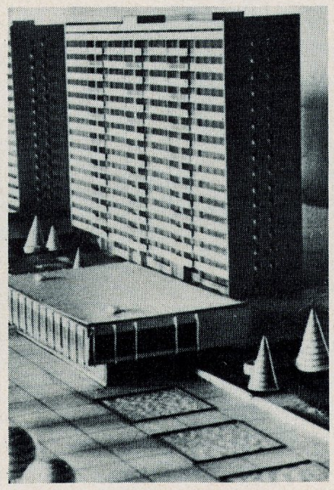
This TV camera can be used 98 feet below the surface to observe the condition of underwater structures or the installation of pipes. The Crab-2 will work even in muddy or polluted water, since it is equipped with an illumination system. The camera weighs 551 pounds. An experimental model has been successfully tested.



NEW RESCUE DEVICE

A simple and clever device has been invented that will enable a rescue vessel to collect and take aboard, in few minutes and under any weather conditions, hundreds of people scattered over a large area after a shipwreck. Alexei Marantsev and Pavel Nikolsky, two Leningrad engineers, are the creators of this device. The rescue work resembles laying an underwater telephone cable.

The rescue vessel approaches the sinking ship. There are people in the water, clinging to lifebelts and pieces of wood. A thick cable is released into the water from a winch at the stern of the rescue ship. With the help of special devices, long foam rubber floats are attached to the cable at intervals of 30 to 45 feet as it unwinds. The rescue ship is maneuvered in such a way that all those shipwrecked are within a closed oval formed by the cable. Two or three pneumatic rafts and a floating anchor are attached to the end of the rescue cable. The people then climb onto the rafts to wait until they can be taken aboard.



NEW TOWN

A new town, to be called Novy Togliatti, is going up not far from Togliatti, the city where the Volga auto plant is being built. The future town will be divided into districts for 20,000 to 25,000 residents, and those in turn into microdistricts for three to five thousand persons.

Since Novy Togliatti is being built in a forest, trees will be left standing for parks, squares and boulevards in the new town, and the bank of the Volga turned into recreation areas and sports grounds.

A big park, to be laid out near the Zhigulev reservoir, should become a Mecca for campers and hikers. A hotel with accommodations for almost 1,000 guests is now being built on the high shore of the reservoir. Apartment houses of five, nine, twelve and sixteen stories are under construction.

LIFE ON MARS

Conditions on Mars as scientists imagine them are being produced in a research chamber, the "Photostat," at the Institute of Cytology of the USSR Academy of Sciences.

Even when there is only 0.0005 per cent oxygen in the "Photostat" Colpoda mopasi infusoria continue to live and multiply. In the process of evolution the infusoria acquired the ability to dry up and stay alive. A dried-up infusorian (cyst) can stand large doses of ultraviolet radiation and a complete lack of oxygen and moisture. It will turn back into an infusorian even after immersion in liquid nitrogen (minus 125 degrees centigrade).



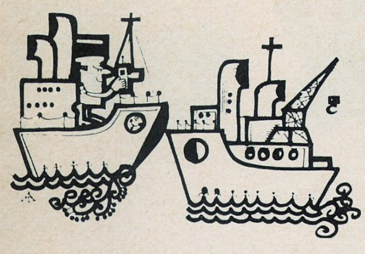
MOVIE-MAKING IN THE ARCTIC

Red Tent, the first movie to be filmed near the Arctic Circle, is an Italian-Soviet project with many well-known Soviet and Italian actors, such as Claudia Cardinale, in the cast. The picture was made in the North Arctic Ocean last summer by a group from the Mosfilm Studio. They traveled aboard the *Ob*, famous for its many Antarctic voyages, to the coast of Spitsbergen and Franz Josef Land.

The film describes the rescue by Soviet fliers and seamen forty years ago of the crew of the Italian expedition led by Umberto Nobile. The "role" of the icebreaker *Krasin*, which rescued the Italian polar explorers, is played by the icebreaker *Sibiryakov*.

NEW VEHICLE FOR GEOLOGISTS

A small, wingless car with a propeller, wheels and pontoons, designed for geologists working in forests, has been put together by a mechanic employed by a field expedition. The vehicle plows through snow, skims over water, crosses swamps and travels fast on dry land. Vladimir Tsvetkov, the mechanic who invented it, has successfully tested the vehicle in forest and cross-country conditions and has even used it as a tug to tow boats loaded with geological equipment up shallow, but practically impassable, forest rivers.



CAMERA JUDGES SHIP COLLISION

For two ships of different nations to collide at sea is an extraordinary event. It involves lengthy and expensive legal proceedings, usually in a neutral court of arbitration.

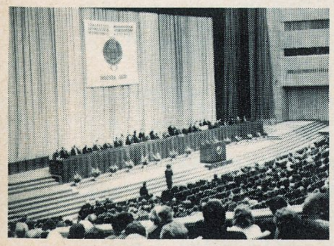
The Soviet tanker *Lukhovitsi* would have had to go through all that if not for a crew member with a camera. The tanker was proceeding down the Bosphorus in the daytime. Sailing conditions were good and every precaution had been taken.

The Greek ship *Avra* was sailing in the opposite direction. Suddenly the ship swerved and struck the *Lukhovitsi* in the side. A member of the tanker crew resting on deck took several consecutive shots of the strange maneuver of the *Avra* with a camera he had at hand. The photographs were indisputable evidence that the collision was the fault of the Greek ship and lost its owners any hope of even partial compensation.

Marine inspection now advises ship's captains to have cameras ready for action in crowded waters.

SCIENTIFIC COOPERATION

Seventy-eight international conferences, congresses and symposiums were held in the Soviet Union during 1968. About 6,000 scientists, from practically every country where scientific research is done, came to our country in the course of the year.



POSTAL CONVEYER

The Kazansky Railway-Station post office in Moscow is equipped with 15 letter-sorting machines, five semiautomatic installations for sorting packages and the latest in telecommuncation devices. It sorts up to 3,600,000 letters, 500,000 packages, 100,000 wrappers and 6,000,000 newspapers and journals a day.

MAMMOTHS

Workers in Northern Siberia, digging at depths of 15 feet, found in the bottom of their dredge the ribs of a mammoth and great chunks of undecayed meat, covered with thick skin and fur. On almost the same day, a bulldozer in the southern part of Western Siberia brought up from an excavation of 6.6 feet or so an enormous jaw, also of a mammoth—an animal that lived at least 130,000 years ago.

It is no rarity to find parts of mammoth skeletons in Western Siberia. They were evidently the most widely distributed animals in that area of the world in prehistoric times.

HIS FRIEND THE WOLF

Berkut was two months old when hunter Dmitri Gulia, who lives in Khabarovsk Territory in the Soviet Far East, found him in the forest. The wolf is now almost two years old, and his owner still finds him easy to train. Berkut enjoys swimming and playing with children.



POPULAR BEVERAGE

Tea Days were arranged at a number of Moscow cafés and restaurants. They were organized by specialists from the Georgian Republic—chief tea producing republic in our country. They acquainted trade representatives and journalists with the various grades of tea and demonstrated numerous ways of preparing this popular beverage.

KUBAN COSSACKS BUILD A HOTEL

Six collective farms in the Kuban have built a holiday hotel on the shore of the Black Sea, at Dagomys, a resort 9.3 miles north of Sochi. Called Friendship House, the four-story hotel of concrete and glass can accommodate 138 people.

Friendship House is the thirty-sixth resort that the Cossack collective farmers of the Kuban have built for themselves. The sanatoriums and hotels can serve 1,500 persons at a time.

RUSSIAN FOR FOREIGNERS

Among the Americans who attended the International Russian Courses offered at the Polytechnic Institute of Leningrad last year, were four teachers of the Russian language, Russian history and international law.

The courses were started in 1967 through the initiative of the Sputnik Young Tourists' Bureau and have become very popular. Those who attended last year were young men and women from the United States, Denmark and Sweden.

The courses are organized on different levels, according to the students' varying abilities in the Russian language. This enables each one to get the most out of his four weeks of study. The program includes six hours a day of language study with highly qualified teachers, sightseeing in Leningrad and meetings with Leningrad writers, painters and composers. Certificates are issued to those who complete the courses.

NEW FINDING ON THE HEART

Soviet researchers have discovered one more fact which explains how the heart adjusts to a heavier load and what the reasons are for cardiac insufficiency. They observed that when the heart is overworked the increase in the size of the heart muscle is accompanied by a fourfold to sixfold reduction in the concentration of noradrenalin.

Noradrenalin "transmits orders" from the sympathetic section of the nervous system to the heart. With a reduction in the noradrenalin "reserves," comes a deterioration in heart control and the force of the heart's contractions and an increase in cardiac insufficiency.

Using this information, the researchers concluded that the "administrative links" of the body wear out before the executive links—the working organs—in this case the heart itself.

12-YEAR-OLD COLLEGE STUDENT

Kiev University in the Ukraine has a 12-year-old freshman, Sasha Dvorak, in its department of mechanics and mathematics. He is the son of a miner in the Donets coalfields. At the age of four Sasha knew how to extract square roots. It took him only a few months to finish a year's work in school and move on to the next grade. He graduated from high school with honors.

Another Kiev University freshman this year is Marina Burik, a 14-year-old Kiev girl, who is also studying mechanics and mathematics.

TO KEEP WIRES FROM DANCING

When electric wires become coated with ice and start swaying in a high wind, they are apt to break and cut off the supply of electricity to whole towns. To prevent the wires from "dancing" the Electric Power Research Institute has invented aerodynamic stabilizers. They do the job.

A GOLD BISON

No jeweler's hand touched this figure of a bison made of pure gold. Nature itself shaped it. This nugget is not the first of Nature's original productions. One in the shape of a five-pointed star was recently found, also at a gold field in the Soviet Far East. Gold nuggets in the form of snowflakes, leaves and flowers are often dug up.

A RARE MASTER

At 22 Nikolai Mitsenko is one of the best restorers of old musical instruments in the Soviet Union. He began his career seven years ago at the Central Music School in Moscow where he worked under Yevgeny Gorokhov, a well-known expert. Today Nikolai works at the Moscow Conservatory of Music, where many rare instruments have passed through his hands.



STONE AGE DRAWINGS

Drawings of dancing people and animals have been found on a rock face along the coast of the Caspian Sea, in the southern part of the Soviet Union. The drawings were found by submarine archeologists of the Azerbaijan Museum of History and are thought to have been elements in a primitive rite of magic for hunters, at the dawn of the Stone Age. Carved images and drawings of dancing figures are usually found hidden in inaccessible places. Sometimes drawings are superimposed on others.

This latest find may tell us more of the ancient history of the territory that is now Azerbaijan, show where the ancient international trade routes ran and help explain the mystery of the cities submerged along the Caspian coast.



EXPENSIVE RACE HORSES

A Kabardino-Balkarian horse named Zadruga was sold for $14,600 at the Fourth International Auction of Runners and Trotters in Moscow. It was attended by buyers from Finland, France, Canada, Switzerland, Denmark, Britain and other countries.

Zadruga was bought by Heinrich Plotke, a West German businessman. Redan, brother of the famous Anilin, the horse that twice won the European Cup, went to Swen Bengston, head of a well-known Swedish firm. An offer of $250,000 was made for Anilin after it won the cup. Bengston paid $7,600 for Redan. Altogether, 73 horses were sold. Some 250 horses have been auctioned off in Moscow in the past four years.

BRIDGE MADE OF GAS

You don't need a raft or a boat to cross this lake, although it's several meters deep. You can wade across it.

Researchers of the Institute of Volcanology working at the Karym volcano on Kamchatka discovered this. They established that the gas which gushes out constantly brings up sand and pebbles from the bottom of the lake. The gas bubbles, sand and pebbles form a bridge that a man could use to cross the lake, if he walked up to his chest in water. There is only one drawback—the water in the lake is boiling hot.

NIGHT DRIVING

One of the many difficulties of night driving is poorly lighted road signs. Chemists are now coming to the aid of drivers with illuminated road signs.

Colloidal researchers at the Lensoviet Institute of Technology have produced a special compound, which they named luminofor, that lights up under the action of an electric current. Metal and glass surfaces painted with the compound will soon be used to illuminate road signs. The compound is already in use in Leningrad. House numbers painted with luminofor can easily be seen in the dark.

AROUND the COUNTRY

...And The Friend of The Kalmyk

By **YURI ROSENBLUM**
Literary Critic

At night he dreamed of the steppes, and it seemed to him that he was again inhaling the spicy fragrance of the steppe grasses, that the green stalks were softly whispering ancient legends. On the grave mounds where the leaders of the mighty nomadic tribes lay at rest, sat stern and bristling eagles. No matter where fate took him—to the rocky shores of the Crimea or the snowy expanses of the Far North—he was drawn to those boundless steppes, where nothing obstructs the view.

There in the Kalmyk village of Abganer Gakhankiny, in a small house of the schoolteacher Kugultinov, David was born in March 1922.

According to an old Kalmyk custom, when a boy was born, a pole was thrust out of the hut's smoke hole so that everybody around would know about the happy event. The schoolteacher's hut did not have a smoke hole and so this type of birth announcement was impossible, but the whole village knew about the new arrival anyhow.

David was a born poet and from early childhood was able to read the wondrous book of nature. In the bell of a newly budded tulip he saw the face of the legendary beauty Ragni, felt his oneness with the world, with his people, with their joys and troubles. And this great fortune endowed him by fate he was to return a hundred fold to his countrymen, transcribing into the music of words their hopes and aspirations.

This small nation has a long and troubled history, handed down through the ages by storytellers in the form of ancient songs and legends.

In the second half of the fifteenth century, scattered Oirat tribes, searching for new pastures, wandered over the hot Dzungar Steppes to the south of the Urals. Periodically they were attacked by warlike neighbors. "When twenty men are not friends, their fortress is of clay; when two men are friends, their fortress is of steel," said the sages. And so the resolute and enterprising Esentaidji united four Oirat tribes into the Dörben Oirat Union—the Union of Four. That was when the neighboring Turkic tribes began calling them Kalmyks, separatists.

Thus began the history of a people whose hard fate brought them two hundred years later to Europe, to lands belonging to the Russian state.

"There are in the world sixty-eight melodies of joy and one hundred and seven melodies of sorrow," says an old Kalmyk song. And one of the melodies of sorrow is the memory of arduous wanderings, which was heard three centuries later, like a distant echo, in the verse of David Kugultinov:

In the comfortless life of long marches,
When we sat by the campfire's glow,
And the hooves of the horses were ringing,
And the murmuring wind whistled low,
It blew dismal or angry or playful . . .
And the road was as far as the sky!
Intertwining with manes wildly flowing,
Were the roads that were speckled and dry.

They traveled along the valley of the Black Irtysh, and when they approached the Siberian city of Tara, they sent a mission to Moscow, to Czar Vasili Shuisky, asking to be accepted as Russian subjects. The sovereign ruled that the request be granted and on February 27, 1608, the envoys were presented with the czar's charter. Thus were the Kalmyk people voluntarily incorporated into the Russian state.

By the middle of the seventeenth century there had grown up on the southeastern outskirts of Russia a semi-independent but militarily strong Kalmyk khanate with developed socio-political relations, its own laws, church and written language. But when their new homeland was threatened, the Kalmyks fought shoulder to shoulder with the Russians.

In the Battle of Poltava in 1709 Kalmyk cavalry routed the picked Swedish troops led by Charles XII. During the Napoleonic invasion of Russia in 1812, Kalmyk cavalry crushed the enemy at Brest and Gorodechno, fought in the Battle of Borodino, and then forced the enemy across the lands of the Warsaw dukedom and Germany, all the way back to France. The yellow-pierced banner of the Second Kalmyk Regiment, with an image of a rider on a white horse, was carried in a triumphal procession through the streets of Paris.

But the victorious warriors returned to the rule of the czar's officials, the local gentry and the lamas. Poverty and despotism held sway in the Kalmyk steppes. The worth of a grown man was reckoned at thirteen rubles. Kalmyks were systematically forced off their land, and there were no schools or hospitals.

There came the time, however, when a message from Lenin was brought to the Kalmyk steppe. And the voice of revolutionary Russia resounded in the rear of the White Guard forces in the most distant Kalmyk villages. By the spring of 1920 not a single White Guard band was left in the Kalmyk steppes.

A new life began. A Kalmyk literature and intelligentsia emerged along with Kalmyk writers, artists, composers and architects. Nurseries, kindergartens, schools, theaters and institutes were set up. And by the time David Kugultinov entered the first grade, there were forty schools in the Bolshe-Derbet Ulus attended by two thousand four hundred pupils.

He began writing very early. His first poem was published in a newspaper when he was fourteen. Four years later the first collection of his verse in the Kalmyk language appeared. The book was not big and, of course, it was too early to speak of general recognition, but his singular talent was marked by the critics. Even at the dawn of his creative career the young poet strove to become a bard of his time, of his generation.

The Great Patriotic War began on June 22, 1941. David Kugultinov has only scanty recollections of his life at the front. This is not because of false modesty but the attitude that duty is not an exploit meriting recognition and fame, but the natural behavior of a man and patriot. Only in the trenches did he really understand the nature and true meaning of war. And that discrepancy between youthful and naïve ideas of battle and what he saw through the sights of a rifle resting on the breastwork gave birth to virile and tragic verse. That is how one of his first wartime poems—"The Song of the Autumn Wind"—came to be written.

The wind whistles low as it slides off the shiny bayonet.
The song that it sings is as sad as a heartfelt sigh.
The blue of the sky is pierced by a crescent angrily,
A reddish crescent that through the clouds doth spy . . .

The Steppes,

But the tragic tone changes in the final lines to the oath of a warrior-bard:

None can escape the moans of the world,
None can ignore the call of the world,
May the steel of the gun all withstand:
My pain and my wrath through it I'll fire.

This statement is very typical of David Kugultinov, always conscious of his participation in the trials and joys of humanity. Perhaps that is why *I* is always transmuted into *we* when he writes of himself.

At the front a man's quality was on trial. It was a stern and merciless test by fire and blood. He came through it with honor, but fate had another trial in store for him.

The injustices the Kalmyks suffered was harsh and painful. The crimes of the renegades and traitors who collaborated with the Nazis during the war cast a shadow on all the Kalmyk people. A wise Kalmyk proverb goes: "On the dung of a single camel slip a thousand." It was hard to reconcile oneself to this bitter truth, but like many other Kalmyks, David Kugultinov was exiled to Siberia. All he had left was his belief that truth would triumph.

In February 1957 the Sixth Session of the USSR Supreme Soviet adopted the law restoring the autonomy of the Kalmyk people.

His home steppe met David Kugultinov as though no time had intervened, as though there had been no parting. "And the genius of life with unheard of bounty" made him a gift of a new image, the image of his native land. But it was no longer a ghost that had sprung up as a memory of the past cherished by a voiceless imagination. For him the steppe again became a reality, and the return to the land of his forefathers was perceived as the natural triumph of Good over Evil and Truth over Falsehood.

Now he felt "the hunger of creativity," the unsaid clamoring for expression:

I put my hand upon my heart and wondered,
Is that a song a'throbbing in my breast,
As yet unborn and with a break still feeble,
A'pecking at the shell of nothingness?

He wrote a great deal but only on themes that excited his mind and touched his heart. He mastered new genres, new literary forms. He wrote the poems "Love and War," "The Prisoner of Moabit," "Living Water," stories in verse and prose and, finally, conceived the large poetic philosophical *Life and Contemplation,* the book he had been preparing for all his life.

The verse in *Life and Contemplation* is all in twelve-line stanzas. Characteristically, the last lines are reminiscent of the traditional Oriental couplets, usually a philosophical generalization expressed tersely, almost aphoristically. The themes shift—now an everyday scene, now an expanded Kalmyk proverb, now a character study.

There are poets who are uncommonly consistent, true to themselves both in life and in poetry. Fidelity to one's self is fidelity to humanity, of which the poet David Kugultinov never forgets he is a part.

NEXT ISSUE





Yakutia is where it gets so cold that milk is delivered in baskets and paper sacks, where grade school pupils stay home when the temperature gets down to 58 degrees below zero, not higher (from the fifth grade up they're excused only when the thermometer registers 67 below). Yakutia is a vast land of permafrost stretching north and east from Lake Baikal and occupying a third of Siberia. Oimyakon, known as the Pole of Cold, is located here, and Aikhal, the first town in the world with an artificial climate. But it's not always cold. In summer the thermometer climbs to 86 degrees and higher. That is the time of the gnats. But neither gnats nor cold bring life to a standstill. The Yakuts breed reindeer and horses, work as lumberjacks and trap squirrel, ermine and sable for the adornment of the world's most fashionable women. They also mine the gold for the USSR State Bank reserve. Since March 8 is International Women's Day, there will also be special articles on the fair sex—their problems and accomplishments. A larger proportion of women work in the Soviet Union than in most Western countries. Even with living standards rising, the number of women working is increasing. There is more than money involved, one article by a newspaperwoman suggests. It deals with the psychological aspects of women's need to work.



Stavropol is a city of acrobats, of acrobatic jumpers, to be more exact. Of all the different kinds of acrobatics, only jumping is popular here. At the Twenty-fourth USSR Acrobatic Championship all gold medals in jumping went to the acrobats from Stavropol. In 1967, at the World Acrobatic Championship in London, the International Federation of Acrobatics awarded the highest title of Mr. Jumper to Vasili Skakun of Stravropol. Skakun, whose name means jumper in English, was called the best jumper in history. The article tells among other things, how Stravropol acrobats learned to "tame the crocodile," as they call the trampoline.

COMING SOON

Life on a collective farm in the steppes.

LGOV is a small town in the temperate belt of the European part of the country. It is surrounded by forest on all four sides. The forests are not as dense as they once were, but you still hear the wary sounds of game and wild fowl.

The prize catch for local and out-of-town hunters is wild boar. But tracking this savage animal takes doing.

"Beware of its tusk," say the initiated, "don't drop your guard a second. When you track a boar, keep looking back; the cunning beast, sensing pursuit, will make a circle and charge from behind. Be sure you kill your boar, not just wound it. You won't have time for a getaway; the wounded beast leaps like a tiger. In other words, watch your step every second when you boar-hunt."

Hearing all this didn't make me feel too good. This was my first hunting trip, and I had never seen a wild boar, even at a distance.

Izvestia photographer Victor Akhlomov, a little paler than normal, bravely asked the hunters to station him where a boar would pop into sight. He wanted a head-on photo.

The cart carrying the amateur hunters, us correspondents included, approached the boar's lair. Our "team captain," Vasili Zelenin, stopped the lead horse and raised his hand, which meant: Quiet! He's close!

Now we all saw the fresh boar tracks cutting across our road and moved onward in total silence.

We spotted other tracks entering the marsh, rode all around the edge and saw no tracks going out, which signified that the animal was in his den.

We led our horses away, and Zelenin positioned us by "number." We hurried onward, sinking into the snow, trying to move quietly but with no conspicuous success.

No. 1 man was Vladimir Khityaintsev, one of the most experienced hunters in the region, No. 2, Dmitri Starodubchenko, No. 3, Ivan Aleksiuk. He picked a place which gave him a wide range of vision, and then remained motionless.

I took notice of all this and stationed myself, as No. 4 man, behind a cluster of bushes. Position No. 5, the best one for sight, was taken by Akhlomov and Zelenin.

A quarter of an hour later a shot rang out ahead, and the beaters began to make a lot of noise. The minutes dragged on, and the shouting drew nearer. My arm started to numb and





Pirate strains at the leash, eager to go for the boar. Samoilov, an experienced hunter, gauges the moment to let go.

The disgusted look on Khityaintsev's face tells us the whole sad story. Half-baked hunters! We had made too much noise.







BAD DAY FOR A WILD BOAR

BY ALEXANDER CHEMONIN, *IZVESTIA* CORRESPONDENT

Photographs by Victor Akhlomov

my vision grew clouded. "Damn it, let him run somewhere else!" I told myself very angrily.

The beaters' cries were already very loud, and a hunter's horn signaled the end of the hunt, but there was no sign of a boar. Was it a mistake, or had he escaped?

We went into a huddle for a briefing. Of course, we had been too noisy before the beaters commenced their job. So the beast had cleared out of his resting place and slipped through between the number positions and the beaters.

Zelenin broke up our huddle by saying that he had an idea where our prey had gone. We hopped into the sleighs and rode off to another piece of marsh.

There we repeated everything, from the beginning. The second and third tries also proved fruitless.

We did the same the following day: found tracks, figured out which direction the beast had taken, circled the place, the beaters went to work, and again, the boar eluded us.

We were all dog-tired when another effort, in the afternoon, failed. But Starodubchenko and Khityaintsev insisted that we follow the trail with a hound. We had sent a messenger the night before to Konstantin Samoilov in one of the villages inviting him to join us with his young, but well-trained dog, Pirate.

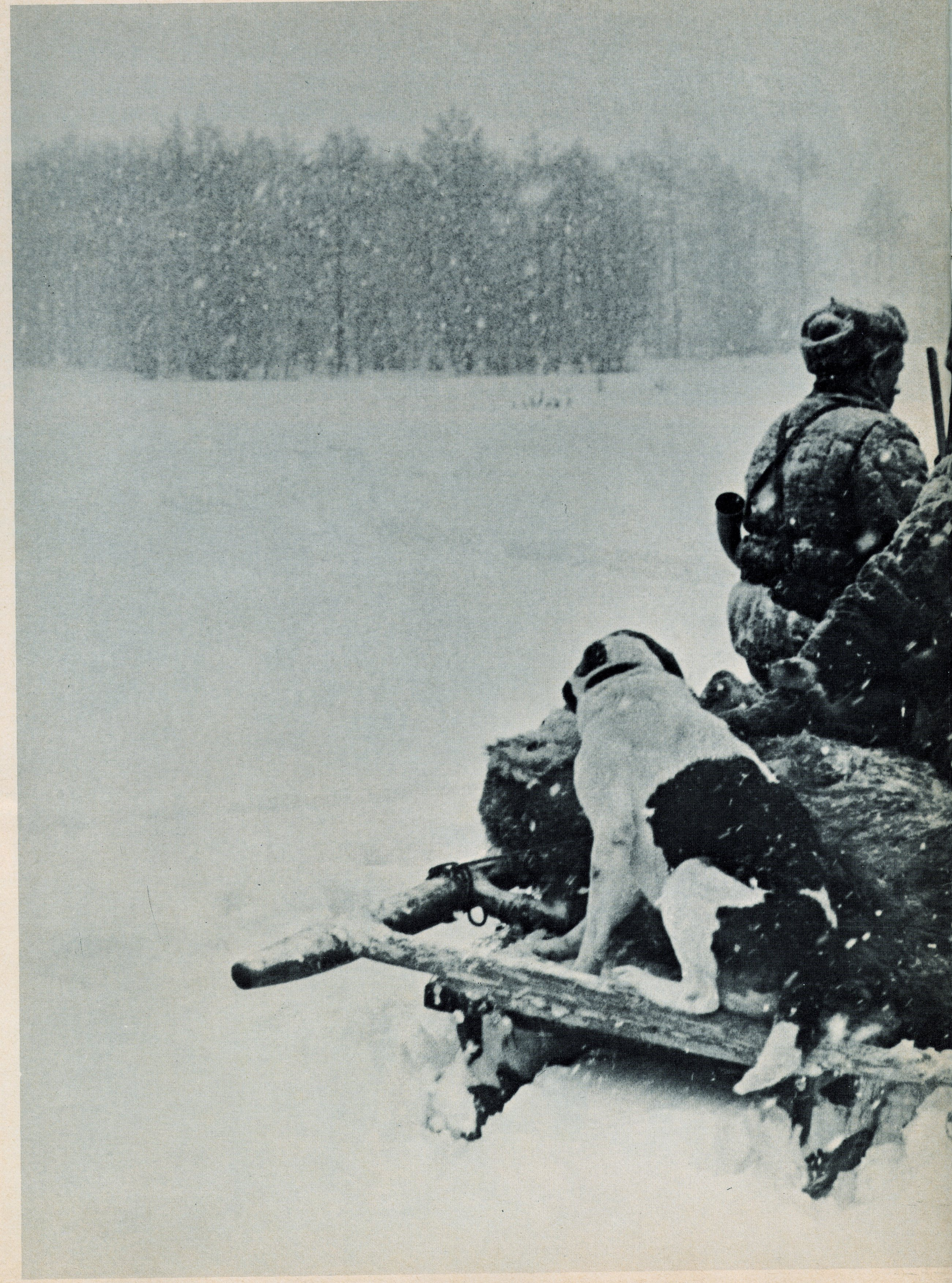
We finally came to a spot where the boar had rested on a bed of reeds and dug up all around it searching for food. Pirate whined and strained at the leash: He wanted to go after the boar without a moment's delay. Zelenin straddled his horse, and Samoilov let Pirate loose. We stationed ourselves in a line. We had hardly covered a hundred yards, when Pirate's frenzied barking told us that he had caught up with a boar. He would keep him at bay while we closed in.

I ran through the deep snow and up a hill as fast as I could. The barking grew louder, when suddenly two shots splintered the air on my left. That was Zelenin, for sure, because Pirate stopped barking.

By the time I dashed up, Pirate was tearing away at the carcass. I only had time to see that the boar was almost as big as a horse, when another shot rent the air, somewhere further, below. Pirate was off like a flash. Someone ran after him. I got as far as the middle of the bog when I dropped to the snow from sheer exhaustion. The hunt was over as far as I was concerned.



We approach the beast's lair, this time in complete silence, we hope. We have our last-minute instructions. Every man knows what he is supposed to do. Does the boar, we wonder?





After we get the boar loaded onto the sledge, even the dog is too exhausted to walk. We won't have to embroider this hunting story too much—we're bringing home the trophy.



These branches of a bush in a winter-bound forest near Moscow somewhat resemble African palm trees covered with snow.

Photograph by Victor Akhlomov